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OCTOBER, 1881.

PREPARATIONS in the garden for another season can now be made with great advantage. For the next two or three months work of many kinds may be carried on; grounds and beds may be remodeled, transplanting of trees, shrubs, bulbs, and all hardy plants may be done, vines and trees may be pruned, grass-seed may be sown, and planting made of some seeds, protection given to plants needing it, and many other kinds of work prosecuted.

It is a good time to dig and grade, and seed-down lawns, for by so doing they will get the earliest possible start in the spring. Transplanting trees and shrubs on the lawn, with the exception of evergreens, is better in the fall than to wait until spring, if suitable preparations are observed for their protection in winter. In the case of trees that would be liable to be blown about by the winds, stakes should be driven and the trees tied to them; if this is not done, the constant motion of the tops causes a movement of the roots, and prevents, or materially checks, the formation of young roots. A mound of soil a foot or eighteen inches high about the base of a newly-transplanted tree, in addition to a stake, is an excellent means of protection, but it should be leveled early in spring. Shrubs need no stakes, but a few inches of extra soil is a good protection. Roses may be

protected by raising a good mound of earth all around them, or, if it is desired to bloom them on long stems, these may be bent over and fastened down by some soil laid on the ends or tips, and then the whole plant covered with leaves, with a little soil thrown on to hold the leaves in place; in spring, the leaves and soil can be removed early, and the necessary pruning be given. The tender varieties of Raspberries should be protected in the same manner. Where it is known to be necessary, Grapevines, after pruning, may also be laid down and covered with leaves. Grapevines, generally, should receive their pruning in the fall; it is dangerous to postpone this operation until spring, as, in that case, it is too apt to be neglected until too late. The same observation applies to pruning all kinds of hardy trees. The Virginia Creeper is greatly benefited by a judicious annual pruning, and there will be no better time than the present to perform it; by annually shortening in the new wood, a more vigorous growth is secured.

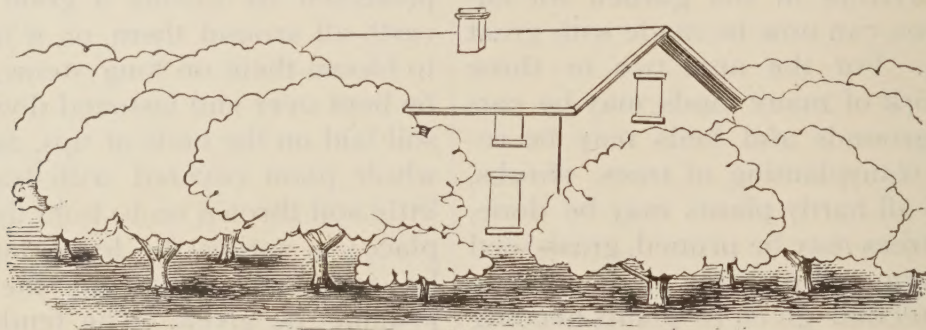
Bulb-planting can be carried on as long as the ground remains open; so, too, may Asparagus beds be made and planted with one or two-year-old plants. Hardy herbaceous plants will be all the better for a light covering of leaves. Care bestowed on the garden now will be plentifully repaid the season to follow.

EXTERIOR OF THE HOUSE.

"There is a place that, for some reason, affects me unfavorably every time I see it," said a friend of mine, pointing to a private residence that we were passing at the time, and this led to a conversation about houses and their surroundings. The house alluded to was an oblong building, a story and a half high, with low-pitched roof, and standing on a large, level lawn, surrounded on all sides with spreading Apple trees. In outline the place is monotonous, as our first sketch will show, while the color effect makes it still worse, for the house is painted a dull brown, the Apple trees are a dark, sober green, and the lawn, which would look bright if it had a chance, is largely in shadow under the compact growth of the trees. The place is gloomy.

Another residence, as next shown, was observed near by, of modern structure,

them; houses that are well-planned, painted in fine taste, and the grounds planted with good judgment. As a general rule, a house should be in harmony with itself, and in contrast with its surroundings; tall houses and steep roofs need a surrounding of trees and shrubbery noted for their breadth and spreading-habit, and a flat-roofed, square house will look best with broken foliage, that is, trees and shrubs of varied, uneven outline. A house should always be painted in warm colors when surrounded with trees—light, warm tints where the trees are dense, or dark in tone, and deep, warm colors may be used where the foliage is light in color, or scant, as the lawn will then be the principal thing in contrast. To paint a house light green, in order to be in harmony with its surroundings, is too much of a good thing; a green house, on a green lawn, among green trees, is a harmony altogether too green to be pleasant. The



LOW-ROOFED HOUSE WITH FLAT-TOPPED TREES.

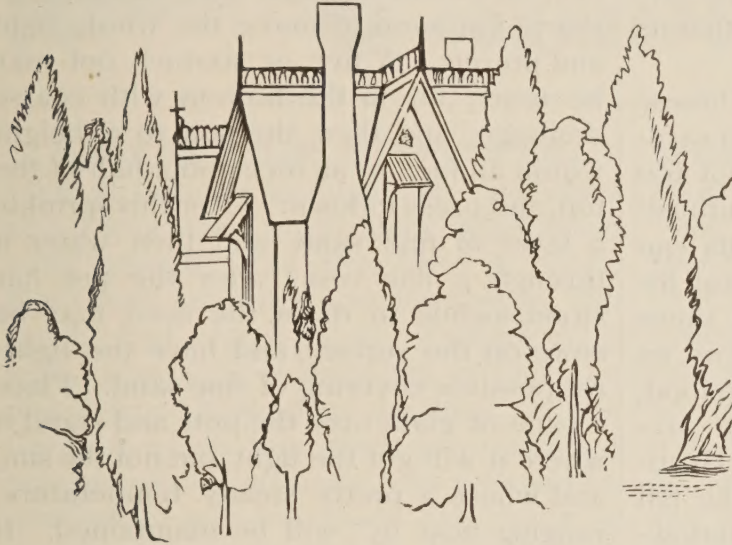
with steep gables, tall chimneys, and angular projections in abundance, and the general effect of it was peakedness. In the first place noticed all is flat surface; in this instance every available space is occupied with some architectural device, good, or otherwise; the house and trimmings are painted in no less than four strongly contrasting colors, while the surrounding foliage is in strict accordance with the house. The trees are mostly tall, because of their close planting, and quite a number of them are of the peaked kind, spruces and firs; then, again, the small spaces between the trees are planted with fancy shrubbery, noted for their variety of foliage, so that, regarding color and structure, the mind is bewildered and wearied with the multiplicity of odds and ends that compose the general make-up of this place.

And, yet, there are places that are pleasant to look at every time we see

eye demands contrast; in fact, it demands the complementary of so much green. To meet this felt want, the house must necessarily be some warm color. We should paint our houses and plant our lawns with a due regard to color, light and shade, and an agreeable contrast of lines, and as these things once done are likely to remain so, if done well they will be to us a perpetual source of pleasure, but if not, we shall ever be burdened with a sense of their unfitness.

It seems almost unnecessary to allude to the custom of painting houses white, but the practice is yet continued with pertinacity, as if the highest idea of beauty was reached in a white house with green blinds. Riding along our village and country roads, white houses, reflecting the rays of a bright sun, will glare at us on every side, until the sense is absolutely pained, and relief is sought by closing the eyes. These places are often without

a particle of shade of trees or vines. To be sure, it takes time to raise trees, but many of the houses could be absolutely transformed by the expenditure of a single dollar for climbing vines, and affording them the proper care in raising and training them. It makes no difference with the seasons in regard to white houses,



SHARP-LINED HOUSE WITH POINTED TREES.

for if the sun shines less brightly or is obscured by clouds in winter, it is probable that, at the north, the ground will be covered with snow, between which and the house there is no contrast, but all is an unbroken field of white. There is no excuse for such shocking displays of bad taste, and with all the attention that is being given to art by our young people, it is to be hoped that this feature of our early development will soon be lost.

Resuming now more particularly the line of thought with which we commenced, it may be remarked that the principle of contrast between the forms of the trees and the main lines of the house does not detract from variety in planting; in fact, variety is what pleases the eye, and we seek it between the lines of the building and those of the trees, but this applies necessarily to the trees in near proximity to the building—beyond them we observe the principle by changing the character of the trees. To properly plant trees and shrubs about buildings to produce the best and most pleasing results, is an art that can only be acquired by observation and thought and practice, but it is worth attention.

A very fine example of a flat-topped

tree is presented in the engraving of a Yellow Wood. The drawing was made from a photograph taken when the tree was in bloom this spring. This tree has been planted about twenty years, and is about twenty-five feet high, being a most beautiful specimen. The Yellow Wood, or *Cladrastis tinctoria*, formerly known as *Virgilia lutea*, is a tree that has been but little planted, but it has admirable qualities. The leaves, it will be noticed, are pinnate, and they are always clean and healthy. The pendant racemes of sweet-scented, pea-shaped flowers, are produced in great abundance, the latter part of May or early in June, covering the tree with a sheet of white bloom that is almost continuous, and making it a marvel of beauty. The flower-clusters of this tree, and those of the Laburnum and the Chinese Wistaria, all of similar shape, but with the three colors, white, yellow, and blue, are admirably adapted to associate in vases and baskets of cut-flowers, giving



THE YELLOW WOOD.

to them a peculiar grace, by reason of their drooping habit, that few other flowers can supply.

THE CHINESE PRIMROSE.

There is no plant cultivated, if, possibly, the *Oxalis* may be excepted, that will produce more flowers in winter than the Chinese Primrose, and, yet, we know that the flower-lovers of this country, as a class, have paid it very little attention; they have not yet recognized its value by giving it the place in their collections that its merits demand.

To have the enjoyment of the Chinese Primrose one must be thoroughly in earnest in its cultivation; in fact, it is not too much to say that, without a little enthusiasm in regard to it, no good results can be attained. The value of this plant for flowers in winter has at different times been noticed in our pages, but before its cultivation shall be generally understood, "line upon line and precept upon precept" will, no doubt, be needed. Horticultural exhibits usually end with the fall months, but winter shows of window-plants, if undertaken with spirit in villages and cities, would probably prove of great benefit to amateurs who are trying, with plants and flowers, to beautify their homes in the dull season. Such shows would naturally call out competition in raising the Chinese Primrose, and thus make its culture better understood; they would, unquestionably, be beneficial in many ways. Window-culture of plants in this country consists, of the most part, of keeping over some of the plants that have done service in the garden beds during summer. Another idea must take possession of the mind of the amateur before any really creditable progress can be made in the culture of house-plants. As the little busy bee instinctively gathers his stores of sweets during the long summer days, so the amateur must be keenly conscious that the plants that are to afford him enjoyment in winter can be brought into a suitable condition only by a summer's preparation and growth. The reason the Chinese Primrose has not come into more general use is, that it requires several months to bring a plant to perfection from seed; a little care and attention is needed during this time to keep the plants in a healthy condition, and only one who is really interested is willing to bestow them. But a genuine plant-lover need not be reminded of the quiet enjoyment that is to be had from this light tax

upon one's time and hands. Seed should be sown any time from February until the first of June, and, if sown at different times, the plants will come into bloom in succession.

A soil for the seed is best prepared by taking some good leaf-mold and about twice as much fibrous loam, made pretty fine, mix them together and add enough sharp, fine sand to make the whole light and porous. A five or six-inch pot may be used; fill in the bottom with coarse drainage, and then the soil to a height within an inch or an inch and a half of the top, and press it down. Over this sprinkle a layer of fine sand, and then water it through a fine rose; after the pot has stood awhile to drain, the seed may be sown on the surface, and have the lightest possible covering of fine sand. Place a pane of glass over the pots and stand it where it will get the light, but not the sun, and where a pretty steady temperature, ranging near 65°, will be maintained. If the atmosphere is moist, but little water will be needed until the plants appear, but if the pot should become dry, water it by standing it in a dish of water, allowing the moisture to soak upwards into the soil, thus avoiding any disturbance of the surface. In about two weeks the little plants will begin to make their appearance, and after the third leaf has appeared the plants may be pricked out into other pots, provided with soil the same as described. Cover the plants with glass, and keep in a light, shady place, as before. Water as may be required, but only enough to keep the soil gently moist, and be careful to avoid wetting the leaves. After a few weeks growing in this way, transplant the plants singly into quite small pots, using the same soil as before. Keep the plants in the same temperature as at first, and, if the season admits of it, place them in a cold-frame; give a little air every day, to prevent the plants from becoming drawn. In potting, the plants should be set low in the pot, for, as they grow, they stretch up above the soil and require a little more to be placed about them. As soon as the plants begin to grow well, repot into five-inch pots, adding a third part of old cow-manure to the soil, and keep them in the cold-frame or a spent hot-bed until they show their flower-stems. The single varieties are much the best for house or window culture.



GRAPES FROM MINNESOTA.

On an autumn morning, about six years ago, I was alone, in my office, when three men entered. The first bore a basket filled with superb hot-house Grapes, the second had a large bundle of wonderfully well-rooted Grapevine plants, of which he disburdened himself on the floor, and the third, by whom the others were ushered into my official presence, was a Canadian gentleman, well-known to everybody in the town as a "sucker." He acted as *cicerone*, introducer-general, to all those whom he supposed to be soft on the subject of gardening.

It may be necessary, as I proceed, to explain what a "sucker" means. He is a species of humanity, peculiar, I believe, to the American Continent. He has a talent for waiting. This faculty is a rare one, and when highly developed and judiciously exercised, always leads to important results. It is finely marked in the pig. He will wait every day for a month, watching the gate of a potato-patch, and if it be left open but once, his object is attained. The sucker will sit smoking every day during a whole summer on a chair in a tavern, with the patience of a kingfisher, and with the continuity of purpose of the pig, waiting to be called to the bar, and his perseverance is always rewarded. When asked if he will "come up and have something," he always says, "I don't care if I do." This is the genuine sucker, and he is always ready to assist in any dirty little piece of business, providing that it opens a pleasing vista of cocktails without hard work.

"There, sir," said the first man, with a pardonable exultation, placing his basket on the table before me, "these Grapes were produced from those vines," pointing to the roots on the floor, "and our friend here," looking at the sucker, "tells

us that you are a gentleman who knows a good thing when he sees it."

My gracious manner was fairly supposed to be an acknowledgement of the truth of both of these statements. It encouraged the sucker. He informed me that the gentlemen whom he had the honor to present had recently arrived from Minnesota, where the Grape before me had lately been introduced as the result of careful hybridization, and that they had been able to secure a limited number of the plants, which they were distributing at the price of four dollars apiece. That it was essentially an open-air Grape, and having withstood the rigor of a Minnesota winter, it would no doubt thrive in the more southern latitude of Western Ontario.

To this amazing story I listened with judicial equanimity, taking in at the same time the whole position; and at the risk of shocking the sensitive feelings of the Canadian gentleman, and undismayed at the price asked, I offered a quarter of a dollar apiece for the four plants, being a fair price for the ordinary commercial varieties, which the specimens produced no doubt were. I wanted some trailing plants to supplement Virginia Creepers in covering an unsightly wooden fence.

After the usual remonstrances, this offer was accepted; among the Virginia Creepers they were planted, and in two years they produced such very fair Concords that I removed them to a more favored position.

I did not feel inclined to interfere with the operations of these enterprising Minnesota adventurers, because I had no proof that they were not honest men, and because I might deprive their customers of the intense pleasure of watching for and anticipating results for two or three years, which of itself was well worth four

dollars a plant, the price asked. The anguish caused by the discovery that they had been duped would pass off in an hour. In fact, a customer would most probably find, at the end of three years, that he had a Grapevine which he would not be without for four dollars, and that, taking into consideration, of course, the pleasure of the three preceding years, he had actually made a clean profit of four dollars on his investment. This is, I think, a fair and philosophical light in which to view such transactions.—R. O'H., Chatham, Ont.

THE CHINESE HIBISCUS.

Hibiscus rosa sinensis is a magnificent greenhouse shrub, attaining a height of over twelve feet, and belonging to the natural order Malvaceæ. Its native country is a matter of doubt, but it is supposed to be a native of the East Indies, as it was introduced thence in 1731. The leaves are of a bright, glossy-green color, smooth, ovate, pointed and coarsely dentate at the end, and the flowers, which are large, are of a dark red color, often exceeding four inches in diameter. The flowers are produced on the young growth during the entire summer months, and if the plant is



grown during the winter months in a warm, light and sunny situation, it will also flower freely during the entire winter season.

As a bedding-plant, this Hibiscus is also eminently deserving of attention, as it succeeds admirably bedded out during our hot, dry, sunny summer weather; for this purpose, two or three-year-old plants are the most suitable, and they should be well cut in when taken up in the fall.

Care should also be taken to keep them as dwarf as possible when used for bedding purposes. As single specimens in the mixed border, this Hibiscus will also prove to be peculiarly attractive. Large specimens can be planted or plunged out on the lawn during the summer months, where, with a little care and attention as to watering, etc., they will be found to be of great value for lawn decoration.

The Chinese Hibiscus can be easily propagated by cuttings, and if the young plants are repotted as often as necessary, and liberally treated, fine specimens will be obtained in a few years. A compost composed of two-thirds well-rotted sods, one-third well-rotted manure, and a good sprinkling of bone-dust will be found to be most suitable. If a warm situation, say about 50°, can be given it during the winter months, it should be kept rather moist, but when placed in cooler situations do not give much water.

With a little care and attention, the plants intended for bedding purposes can be wintered under the stage in the greenhouse, always choosing a warm and dry situation. During the season of growth an occasional watering of liquid-manure will be found to be of benefit to them.

When grown in the greenhouse, this Hibiscus is very subject to the green-fly—a slight fumigation of tobacco will soon destroy them, however—while, if grown in the window-garden, Cole's insect destroyer applied with an atomizer will be found to be a certain remedy.

In order to obtain the very best results, do not allow the plants to become pot-bound, and, in the event of the plants becoming too large for the pots, turn them out of the pots, reduce the ball of earth and roots about one-half, trim the plants back severely, and repot in the same size pot, using fresh compost. The best time for this operation is about the middle of May. Water should be carefully given until the plants become well established.—C. E. PARNELL, *Queens, L.I.*

THE DRY WEATHER.—The excessively dry weather in August and September will have the effect to lessen very greatly the yield of Potatoes, and root crops generally, in this county. The Apple crop is very light, but such a season is favorable for a large fruit crop next year.—ORLEANS.

ASSOCIATION OF THOUGHTS.

Is there any one thing in nature or art which can hold and carry an association, be it of pleasure or pain, like a flower, or the perfume of one? Few of us but love them all for their own beauty and sweetness; many of us love some particular one which seems fairer and dearer than all others. To one friend, if I can make my own selection, I always give Pansies; she says they are human, and loves and kisses them as though they were baby faces. Another has always in her room red and white Carnations, though they would be superseded by June Pinks if they were as attainable at all seasons; and this because years ago, at the old home, the walk from door to gate was bordered each side with this sweetest of June's lavish gifts, and in the memory of those she loves no greenhouse beauty so well. A mother who laid away a precious baby years ago, will even now be overcast by a shadow of pain in catching the odor of a Rose Geranium, because the leaves were strewn about the little form, the perfume lingering with the pain of looking her last upon her treasure. One lady will never have Smilax among her flowers. In selecting her cut flowers, she chooses Fern or Rose leaves for green, because, Smilax to her is without expression, being grown and sold by the yard for decoration.

Looking through an old botany (Mrs. Phelps') not long ago, I found flowers dried and pressed for years, just where they were placed between the leaves as they had been identified with their description on the printed page. In looking at these I was reminded of a curious episode. Twenty years or more ago I lived with my parents in a town in Ohio which had a local celebrity for the beauty and picturesqueness of its cliffs. The Little Miami just here ran through a narrow gorge, the limestone rocks rising perpendicularly in some places to a great height; so narrow is the chasm that there is a legend of an Indian who, when pursued by a rival brave cleared it at a bound, while the enemy in his eagerness fell short of the opposite bank, and was lost in the unfathomable water far below. Be this as it may, a rustic bridge was built on the spot, and there we would stand and imagine the chase. A little way down the river the banks fell away and were less steep, giving a foothold for good

climbers to scale the walls in search of wild flowers, which grew in great profusion; and though the variety was not large they were somewhat unlike those of the same family I have gathered elsewhere. The Hepaticas were blue, dark, and light, with another of a lavender shade. There was a deep rose one, and a white with a pink tint, some of them very large. Then there was a Dicentra, so fragile and dainty I always felt it an insult to call it Dutchman's Breeches. The Arums, large and small, grew back in the wood, and down near the water the quaint, solemn Jack-in-the-pulpit. There, too, I saw for the first time and, like your correspondent, Mrs. M. B. B., marveled at the Dodder. For these earliest spring beauties we clambered merrily over the rocks year after year; my friend Sue and myself racing from school, for the time between four o'clock and dark was far too short in April days. The very first buds of Hepatica, peeping out with brown woolen hoods on their wee heads, were hailed with delight and whispered over, for fear another might hear of the earliest spot, and pluck from us the honor of showing the first blossoms on our teacher's desk. Time went by; the flowers grew for other girls and boys, Sue and I went away to school and never lived there again, but memory often turned to those flowers, and the happy hours we spent among them. Once, on a hillside in Canada, I gathered the rose-colored Hepatica, and thought it must have been spirited away from that spot by the river, though, probably, they are not uncommon.

A few years ago I found myself settled in Boston, and very soon after went with my husband to visit a school for the deaf, in which he was much interested. I was introduced to the Principal of the school, who gave me most courteous greeting. As I turned to glance about the room, my eyes and attention were caught and held by a small bunch of wild flowers in a glass on the desk. The room and all it contained faded from my sight; I stood again among those cliffs in Ohio, the flowers at my feet, Sue beside me, the subdued roar of the great city was the river rolling beneath. For some moments so strong was the association, my mind could not come back. A gentle touch aroused me as the doctor said, "Miss F. is speak-

ing to you." In apology for my seeming inattention, I told her those flowers had carried me back twenty years to the village of C——, in Ohio, where I had gathered just such ones. "Why, that is very curious," said Miss F., "for these were sent me from C——, Ohio, but, I dare say, you mean C—— near Cincinnati?" "No," said I, "near Yellow Springs." Then judge of my delight when I found they were from my cliffs—my dear old friends! A sister of Miss F. had recently moved to C——, and had sent these as specimens of Ohio wild flowers. You may be sure they were generously divided. Was it not a curious coincidence that I, who was, probably, the only person in all the great city who had any association with them, should have met them so unexpectedly?

" 'Tis not by appointment we meet delight and joy,
But round some corner in the streets of life,
They meet, and clasp us, with a smile."

—MRS. B. G. B., *Boston.*

LILIUM CANDIDUM.

JAMES VICK:—I would like to tell your readers about my success with *Lilium candidum* in the house. I planted the bulb in a seven-inch pot, in very ordinary garden soil, and treated it exactly as recommended in your MAGAZINE for June, 1880. The result was a stalk three feet high, with ten perfect Lilies. I also successfully forced a white Japan Lily in the house. The Easter Lily of the south, *Zephyranthes Treatiæ*, does admirably in doors with common treatment. I planted eleven in a six-inch pot, with such soil as I give my Geraniums, two others I planted separately in two-inch pots; when they showed signs of growth I kept them rather moist, and the result was very satisfactory. Every one blossomed, and one ambitious little bulb gave me two flowers. I was very much surprised at the size of the blossoms, such immense cups, and so fragrant, from such small bulbs and fine, grass-like foliage.

I must speak, before I close this letter, of my Carnation President De Graw, which I purchased two years ago. The first year it did not bloom, but, after being plunged in the garden all last summer, and being well pinched back, it behaved splendidly during the winter, giving me over forty perfect blossoms, waxy-white, warm and spicy

Will you tell me if I can force the bulb

of *Lilium candidum* successfully this winter. I set it in a shady spot to rest all summer, and it has already put forth a nice clump of leaves. I thought of removing the top soil and putting some fresh in its place, and treating it the same as last winter. If I have not trespassed too much this time, I will write again and tell your readers something of the Japanese Climbing Fern.—E. C. B., *Tacoma, Wash. Ter.*

It is doubtful that the same bulb will do as well another winter, but a little weak manure water in the blooming-season will help it to develop. The experience with the Climbing Fern will be acceptable.

OUT OF DOOR CHILD-LESSONS.

Teachers or parents at a loss for some pleasant and instructive theme as a relief and change from book lessons, can find a most interesting subject to children in the nightly sleep of plants. The Wood Sorrel, Oxalis, Morning Glory, Pimpernel, Marigold, &c., close their flowers in the evening; the *Portulacca* quite early, and the white Pond Lily gets tired soon after noon of holding its charming petals extended out and folds them up as we fold a Chinese umbrella. The watchful eyes of a group of children will find many oddities of behavior of this kind among the flowers, if they are encouraged to look for them, and unspoken morals will sink into their minds to remain. The Evening Primroses are a common example of a flower that is a night-watcher, sleeping through the day.

But besides this sleep of the flowers, some leaves fold themselves up as if to retain the faces that have bathed in the sunshine all day from suffering from the chills of the night; for they fold the upper faces inward, one often closing against another, as the Sensitive Plant and many of its relations. The White Clover, having three leaves, folds the two side leaves together, giving the leaf-stems a twist to bring them face to face, and then bends the third leaf over them. There will be some extra early rising to see when some of these waken up.

A writer in the *Mark Lane Express* says that the very curious bending down and raising up of leaves and leaf-stems, which bend as our arms bend at the shoulder, is effected by an aggregate of cells on each side of the base of the petiole, or stem, called a pulvinus, a swelling;

these become full or empty, (alternately turgid and placid) by being filled or emptied of water, thus pushing the stem up or down.—W. Tyrone, Pa.

BOUVARDIAS.

Bouvardias are handsome, compact, little shrubby plants, and particularly desirable on account of their winter-blooming habit. They are natives of Mexico, where they bloom very early in spring after the wet season sets in. The gardener propagates the plants by cuttings in the spring, and keeps them growing through the summer and fall; and in the early winter in the greenhouse, conservatory, or window, they will commence to bloom freely and continue in this condition until spring. There several native species, of which *B. Leiantha* is a dark



SINGLE BOUVARDIA.

scarlet. *B. triphylla*, in its native locality, has several varieties, and this particular susceptibility to variation has rendered it not difficult for gardeners to originate new varieties of it. Without attempting to

go through the long list of cultivated varieties, a few of the most valuable may be mentioned, such as *Hogarth*, which is a light scarlet; *Humboldtii corymbiflora*, with flowers of a pure white, over two inches in length and an inch across, and delightfully fragrant, is the largest-flowered variety and has been considered the finest one in cultivation; *Davidsonii*, a variety with white flowers, has an abundant-blooming habit; *The Bride* is a handsome pink. Within a short period the flower-world has been advised of a novelty in the shape of a double Bouvardia, known more particularly under the name of *Alfred Neuner*, which it bears in honor of its originator. The engraving here presented of it conveys a satisfactory idea of the appearance of its double flowers and full truss. It is a pure white, and delicately fragrant. After a sufficiently lengthened trial it can be recommended to your readers as entirely reliable, and a plant with which they cannot fail to be

highly pleased. It is a sport from *Davidsonii*, and inherits the free-blooming and vigorous habit of that fine sort. The flowers are rather larger than those of its parent, and are composed of three rows of petals of a pure white.

Bouvardias that have been kept in the house over winter do best if turned out



DOUBLE BOUVARDIA ALFRED NEUNER.

into the open ground, where, in the latter part of summer, and in the fall they will produce their flowers, and will continue in bloom after being again removed to the house. Young plants bloom most freely, and it is best to keep up an annual supply of them.—L.

GARDEN GOSSIP.

Satirica accuses me of "making a poor mouth" in some recent floral notes published in the *MAGAZINE*, and she calls my garden a "twenty-five cent garden!" I make a "poor mouth," (a homely phrase, but expressive,) no indeed! I think I have the very prettiest garden in the neighborhood, and *Fanny* thinks so, too. "Who is *Fanny*?" Never mind who she is; I have named my lovely, dark-eyed *Pansy* for her, because it always reminds me of her. *Fanny* is my safety-valve; she knows every flower in my garden as well as I do myself, and I am very anxious for her to make me a visit and approve of some changes I have been making, and see my new *Pansies*. This has been a very favorable season for *Pansies*, and I have over a hundred young plants just coming into bloom, and how delightful it is to watch them opening day by day! A good many are white, so far, which pleases me well, for, as *S.* says, I have a perfect "craze" for all white flowers. I have at

present a bed of white Petunias, white Perennial Phlox, Sweet Alyssum in quantity, and a little pure-white flower that I send to you for a name. It is a hardy, herbaceous perennial; dies down to the ground in winter, begins to bloom in July, and lasts until frost. It is excellent for cutting.

I want to describe some "beauty spots" in my little Eden. One of them is right under my window—a stone wall four feet high at the end of the house is covered with Virginia Creeper; there is a Sweet Briar bush in the center, under the window, then a row of Sweet Peas and Nasturtiums the length of the wall, and a green bank sloping down to a bright flower-bed. The Nasturtiums were an after-thought, or an accident, for after the Sweet Peas came up they were attacked by a minute brown insect and I feared they would be killed, so I planted the Nasturtiums to replace them; but they outgrew the little pest, and the Nasturtiums came up and they now get along very well together, producing a beautiful effect. The grass on the bank below this narrow border I cut with the scissors, and I prune the Nasturtium leaves, and the whole looks like a picture, and it cost just ten cents, the sum I paid for the Sweet Peas. The Virginia Creeper I got in the fields, and the Sweet Briar came from the woods. The Nasturtium seed, I always save myself, for I admire them very much, and have them all about the place; they are little trouble, and grow in all sorts of seasons, dry or wet, hot or cold, it is all one to them. Petunias are of the same obliging disposition, so, no matter what happens, with these stand-bys, one may always have flowers.

Here, in the northern border, the home of the Pansy folks, is a rosette made of Golden Feather, set in a circle with one in the middle, and Pansies all around; it is very pretty. The Golden Feather I raised from seed; the plants are two years old. I do not allow them to bloom, for the flowers have no beauty; they and the Dusty Miller are both hardy here, and so is *Datura Wrightii*, but the latter is late coming up, some of mine not appearing until June. *Datura Wrightii* is a favorite of mine. I call it the Moon Flower, it is so large and white and blooms in the evening; then it has such a strange, sweet perfume, and there is something mysteri-

ous about it altogether—it peers forth at dusk out of the greenery like the ghost of a nun. It is not pure white, for there is a tinge of lilac on the edge of the corolla, but at a little distance this is not perceptible. In moving one this spring I broke off several shoots, which I planted, and they all grew, so I have quite a collection now. The Golden Feather grows well in the shade; the trees meet above these and shake hands over them. Each tree has a Virginia Creeper running up it, and a chair stands here, where I can sit and commune with nature, or "idle away" the time, as S. says. Well, I do believe I have a talent for doing nothing, and I cultivate it along with the flowers and the birds.—JENNY DARE.

THE HERBACEOUS BORDER.

MR. EDITOR:—The August number of your pleasant MAGAZINE has a quotation from an English horticultural paper, complaining of the ignorance of young gardeners in regard to annuals that were commonly known and grown twenty years ago. I am one of the class referred to by the writer you quoted, and have been trying to hope at least that we are not quite so bad as his sweeping statement would make us. If we are, employers and the older gardeners, who have it in their power to choose what shall be grown in the garden, must take their share of the blame, and that not a small one, as must be obvious on a very small amount of reflection. A sixteen years' practical acquaintance with English gardens and gardeners, young and old, will not allow me to accept unmodified the statements in question, although true, probably, to a larger extent than I am now aware of. Of course, the present system of flower-gardening calls for a comparatively few varieties of plants, including very few annuals. I have heard it sarcastically called by some of the old-school gardeners the "scarlet-fever and yellow-jaundice style," in allusion to so many red *Geraniums* and yellow *Calceolarias* being used. That remark, however, would by no means apply to all gardens planted after the modern style, as very many of them are arranged with great chasteness and splendid effect. In this, as in most other things, it is the extreme of the thing that has brought it into disrepute with many.

I sincerely hope that the article quoted from will have a salutary effect upon those whom it concerns. I am entirely in sympathy with the writer, and my main object is not at all to combat his statement, but to say a few words in addition to several articles already in previous numbers of this MAGAZINE on the subject of herbaceous plants. With your permission, Mr. Editor, it shall take the form of "telling an experience," as another correspondent put it a few months back.

It is my hap to have come of a gardening line; not only my father, but both of my grandfathers being gardeners, and from five years of age I lived in a very aristocratic little village, in which were several gardening establishments where from two to ten gardeners were employed. After eight or nine years spent in some of the smaller of these, I met with a slice of luck that I had often longed for, and obtained a situation as "second" in the greenhouses in the largest gardens in the neighborhood, where sixteen men and a horse were kept the year round.

My work was all under glass, but that did not prevent my keeping track of the work in other departments, and one especially interesting to me was the herbaceous border—a very fine one, bounding two sides of the very extensive pleasure grounds. Here, from the first peeping of Snow Drop and Crocus, and the bursting of the first buds of Wallflower and Polyanthus, right on until cold weather set in enough to send things to rest, one might feast one's floricultural soul to the full. This border must have been a third of a mile in length and eight or ten feet in width, backed nearly the whole length by Laurel and other shrubbery and trees. The majority of the occupants were, of course, perennials planted according to height, and included Hollyhock, Lupins, Wallflowers, Stocks, Rockets, Phloxes, Hedysarums, Lychnis, Day Lilies, Chrysanthemums, Sweet Peas, Delphiniums, Irises, Anemonies, Aquilegias, Sweet Williams, Polyanthus, Dielytra, Saxifraga, Spiræa, Francoa, Veronica, Gentian, herbaceous Geraniums, Erodium, Geum, Fritillaria, Helianthemum, Hepatica, and many whose names I never knew, and some, perhaps, I have forgotten. Very conspicuous among these, especially at a distance, were the Yellow Tree Lupins. These, growing about five feet high, and

covered with their canary-yellow spikes, lighted up the border as though they had been so many candelabras. Every year a considerable quantity of roots too tender to remain in the ground all winter were added; Dahlias, Camellias, Gladioli, and Marvel of Peru being the principal of these. Another annual addition, contributing in no small degree to the beauty of the border in early spring, was the collection of bulbs, as Hyacinth, Narcissus, Tulip, and Tuberose. These having done duty in greenhouse and room-decoration were turned out in clumps, and gave good and useful spikes for cutting even the third and fourth seasons. Lastly, the annuals themselves came in to swell the ranks of the border, especially at the front. They were raised in this way: a mild hot-bed of leaves and stable-manure was built about three and a half feet high, forty-five or fifty feet long, and about five feet broad; this was covered with good soil, finely sifted at the top, and on this bed were sown a collection of annuals whose initials ranged from A to Z, and included seven or eight varieties of everlastings and some ornamental grasses. Among the everlastings, *Acroclinium*, *Rhodanthe*, and *Gomphrena* were grown in pots as well as in the border, as they were found very useful and effective to mix in with greenhouse plants for room-decoration.

The hot-bed on which the annuals had been raised was, after their removal to the border, planted with Vegetable Marrows, identical, I believe, with what is here known as Scallop Squash.

This border was very little trouble in comparison with the results it yielded. A forking over in spring, with, perhaps, a little manure, and carefully, so as to avoid digging up bulbs, &c., which were generally marked with a stump; the planting of Dahlias, and other roots and the annuals, an occasional looking over with sticks and tying material, and the clearing away of decaying stems in the late summer and fall, being about all the care needed, excepting in very dry seasons, a little assistance from the hose.

On many a cold, spring morning two of us have taken a large, shallow hamper, such as the London nurserymen use to pack plants in for the home trade, about a foot deep and three and a half feet over, and from this border we could easily fill

it with a good and varied assortment of flowers, helped, perhaps with Lilacs, Laburnums, and Andromedas, and sometimes Rhododendrons and Kalmias; and this at a season when we were often glad to put down the basket and breathe in our hands to keep our fingers from losing all their feeling, for often the Wallflowers and many other things would bloom even when the spring morning white-frosts would make them quite stiff for an hour or so.

A border planted in the way I have described, no matter how small nor how large, will be a never-failing source of pleasure and satisfaction in climates where some of the members will bloom nearly, or quite the whole year, and even here, in Western New York, or farther north, many of the things would be adapted for the same purpose, and give abundant satisfaction during the greater part of the year.

What is there better in their way than a good collection of Perennial Phloxes? What more showy than an assortment of Irises, many of which are as gorgeous as Cattleyas.

The geometrical style of flower-gardening is very handsome if well managed, but the herbaceous border is fully as ornamental, more useful, and, in fact, where many flowers are wanted in summer, quite indispensable.—J. B.

ACALYPHA MACAFEEANA.

Acalypha Macafeeana has proved, the past season with me, a very excellent foliage plant. Its large, broad leaves are a



bright red, blotched with a deep, bronzy-crimson. It stands the sun well, and must come to be used freely in bedding, thus superseding some kinds now in use that turn a dingy brown when fully exposed.—S. C. W.

THE SPRING GARDEN.

The spring garden must be anticipated in the autumn; indeed, it takes me all summer planning and looking after the hardy perennials that are to help the Crocuses and Tulips to get up a grand welcome for the May. Pansies, for instance, for early blooming must be grown the preceding season, and they require a deal of looking after through the hot weather. I have just got through watering mine with lime-water, to kill the worms in the soil, and I would advise all Pansy-lovers to keep a supply of lime-water on hand and apply it frequently about the roots of the plants. The most inveterate enemy of the Pansy is the small, white worm, fine as a thread, that eats the roots and stems underground. Slugs are troublesome at times, as they are fond of tender leaves, and the Pansy just suits them, but a dressing of ashes will make it very uncomfortable for master slug, and he will leave on short notice if the ground is sprinkled with sifted ashes about the plants.

My Sweet Williams are looking very well indeed, and I am wondering where I shall put them, but the frost will make room for them before long; they are in a long box at the kitchen door, where I can keep my eye on them and sprinkle them every time I wash my hands. I believe that half of my success with seedlings is owing to having them so near that I could not forget them if I would. After my seed-boxes are emptied of annuals in the spring, I add fresh earth and plant with perennials; in the autumn the perennials are ready for the garden, and the boxes are set aside for next year's annuals. I usually go to the woods in the autumn and get leaf-mold and put it in the cellar for spring-planting, as very often the ground is frozen when the seeds should be sown.

A favorite spring-flower is the Columbine. I like it for many reasons, one is its sportive disposition. I began with three or four varieties, and now I have more than twenty, I should think, though I have never counted them. Some of the sports are so fine that I think of naming them; one I do call the Strawberry, it is so double it is almost solid, and is of a luscious crimson color. This plant is dwarfish. Another, a lovely pink and single one, is taller than *A. chrysantha*,

and lasts a long time. Another semi-double one, of a dark-purple color, has the face upturned toward heaven, as though taking a survey of celestial scenery; its stamens and pistils are very showy. I always let the plants go to seed, and the Goldfinches attend to the rest. I never save seed of any sort, excepting *A. chrysanthus*, the new golden-spurred; I have a number of seedlings of this variety in my seed-boxes.

Another old-fashioned flower that always has a place in my garden is the Canterbury Bell. It is sometimes injured in winter by hard freezing, and the white grubs, the larvæ of the May-beetle, often destroy it, but there will always be a few plants that survive all enemies, and even one well-grown plant repays for much trouble. Some seasons the plants seem to be exempt from all foes, and grow and flourish in a wonderful way. They are biennial, and seed must be sown every year, as they never bloom but once, and frequently not until the third year from seed. The single variety is my favorite; the double is curious, but a bell-shaped flower is never improved by doubling.

One of the hardy perennials dear to my heart is the Chrysanthemum. I have never attempted to raise it from seed, as I have always been able to procure roots, and it grows so readily, and increases so rapidly from shoots. I love the pure white, but I like them all. They come at a time when the gardener needs a little cheering up, and what lessons they teach to the receptive mind!

The Montana Verbena is a good, early flower. It fairly bursts into bloom in May, and after very abundant flowering it continues to give a few blooms until hard frosts. I have two quite distinct varieties, a dark purple, and a purplish-pink, and if any one wants to gain my good will, let him invent a white and a scarlet variety of this hardy Verbena.

Delphinium formosum is a very beautiful perennial, and easily raised from seed. This season, after mine were done flowering, I cut away the stalks, and they have all started afresh from the roots; and some of them have flower-stems; whether the cutting will injure them I do not know, as I never did it before. Some perennials thrive on this treatment, but a Pæony resented it and would not bloom the next year, so I do not meddle with Madame

Pæony any more, but let her have her own sweet will, and the dark green leaves are handsome all summer. A red flower of *Phlox Drummondii* has climbed up into one of the Pæonies and peeps out through the greenery, and another has a white *Petunia* for a near neighbor, and, to a leaf-lover, like myself, Pæonies are pretty all the season. I cannot take a flower to my heart unless it has a handsome foliage; the rich, green leaves of my favorite Pansy are half the charm of the plant.

But there are some annuals that belong to the spring garden, and should be sown in October, as *Mignonette*, *Sweet Alyssum*, *Candytuft*, *Nemophila*, and *Clarkia*. —E. A. M., *Alleghany Co., Pa.*

THE NARCISSUS.

MR. EDITOR:—You have several times called attention to the Narcissus in the MAGAZINE, but, I think, not very recently, so I thought it would not be amiss for me to say a word or two about my favorite flower, especially as it is now about time to plant them. I take great pains with my Narcissus, not that they require any very special care, but we all take special pains with the flowers that we particularly like. The old Daffodil, though not remarkable for its sweetness, is a flower not to be despised, and I like it on account of early associations, for I believe it was the first flower that attracted my especial attention when a child, and the one I first cultivated.

The *N. poeticus* is one of the hardiest and best, being snowy-white, with a creamy cup, fringed with red, like that of the eye of a pheasant, hence it is commonly called Pheasant's Eye Narcissus.

The Trumpet Narcissus is a real beauty, with a large cup. There are several varieties, known by different names, but a good deal alike. Of the true Trumpets there are two good varieties, gold and silver, or white and yellow. There is, also, one variety called Hoop Petticoat, with a very broad throat.



NARCISSUS POETICUS.

The Campanel, or Great Jonquil, is a very excellent Narcissus, and is wonderfully sweet-scented.

The varieties named are all hardy, and will flourish in any garden where the water will not lie during winter or spring, but there are others that do not succeed very well in a northern climate in the garden, that are nice for winter-growth in the house. The class to which I refer is the



JONQUIL.



TRUMPET NARCISSUS.

Polyanthus Narcissus, so called because all bear their flowers in clusters, like the Polyanthus. They are sweet-scented and handsome for pots, and will also flower in water, like Hyacinths, and are of all shades, white, yellow, and deep orange. I grew, last winter, trusses with fifteen flowers, and they were splendid.—WISCONSIN.

DAPHNE INDICA ODORATA.

As a conservatory-plant, the one bearing the above name is of the highest value. It is universally prized for its sweet-scented flowers, that are white with just a shade of pink. The leaves are a dark, glossy green, and the plant, when well trained, forms a compact, handsome bush. I have had one for several years in my conservatory off my sitting-room, and it now stands nearly five feet high. It generally commences to bloom about Christmas, and continues producing more or less flowers all winter; they scent the whole house, but the perfume is very agreeable. The flowers are formed in clusters on the ends of the shoots, and the aim during its summer growth is to obtain strong shoots from as many joints as it will bear; of course, considerable judgment is required to regulate the growth, and only experience will enable one to determine how best to do it, but,

by practice, one may learn how to check growth in one part by pinching in the young shoots, and to develop it in another.



I keep my plant in summer, with a few other plants, in a small pit with a sash, which is thrown off or covered, as may be necessary. Plenty of drainage is given, and the soil is composed of loam, leaf-mold and sand. I am careful not to over-water the plant, as an excess of water will check the growth.—H.

CAPE JASMINE.

MR. VICK:—I wish to say to those readers of the MAGAZINE who have unsuccessfully tried to bloom the Cape Jasmine, *Gardenia florida*, in the house, that I have proved a method that was advised to me,



and I can recommend it. It is to keep the plant moderately cool during winter, and to plant it out in the garden in spring as soon as the frosts are over. It will bloom nicely there in the early part of summer. In the fall the plant can be potted, taken in and kept over winter as before.—S. C. W.



LETTER FROM ENGLAND.

MR. VICK:—I have often thought I would write a few more lines for the *MAGAZINE*, but have not for a long time done so. My recent visit to the Royal Horticultural Society's exhibition, held at South Kensington, London, has so impressed me that I feel impelled, at the risk of my letter reaching you a week or so later than the horticultural papers, with their practically-written articles, to give a little account of my own for publication in the *MAGAZINE*, should you deem it worthy of putting into type. As you, and probably some of your readers, are doubtless aware, South Kensington is the fashionable center of London. It has several museums, the like of which for architectural beauty, size, and the miscellaneous character and value of their contents, probably are unsurpassed in the world. The gardens, too, have a wide reputation, although I have seen, even in London, exhibitions of the landscape gardener's skill which I admired more. Still, South Kensington gardens are well worth a visit at any time during the summer season, and on the 3d of June, when the "Great Flower Show" opened, they were in fine condition, and, with the beautifully green lawns dotted with tents, intermingled with exhibits of horticultural implements, different designs of greenhouses, rustic furniture, garden pottery, &c., coupled with the gay attire of the "upper ten," to use a term oftener heard in England than in America, and a lovely June day, they presented an appearance of no ordinary character. While some of the visitors walked, and others rested on the chairs and seats, and the exhibitors busily sermonized on the merits of their individual exhibits, the band of the Royal Scots Guards sent its enlivening strains out

upon the air, and discoursed sweet music from the works of the best masters. The day seemed made for the occasion, and the scene was most charming.

The flowers and fruits were arranged in two tents, an enormously-long one, covering one of the broad, nicely-graveled avenues, and leading into an immense circular tent, the space covered by which had, by the skill of the gardener, been specially adapted for the purpose, being filled with artificial mounds and terraces. There was much to create surprise, and to render one in a condition where he is lost in wonder, as he endeavored to conceive of the possibility of gathering such a variety of Flora's treasures; indeed, it seemed marvellous to realize that such a variety actually existed.

Among the vast collection of flowers which most delighted me were Orchids, Pelargoniums, Azaleas, Ericas, Gloxinias, and Roses, all in pots. Never before have I seen such a mass of choice bloom in any place. Orchids were of such delicate tints, and of such rare varieties, that hundreds of dollars, I was told, would not purchase some single plants. Why, one could almost fancy he was looking at rare French butterflies, and other insects, as he gazed on these Orchids. The first prize for distinct varieties was £20. The Azaleas were really brilliant, and trained in pyramid form; some of them, although I did not measure, could not have been less than four feet, and even more, in diameter at their base, and perhaps six feet high, with scarce a green leaf to be seen, the flowers were so compact. Gloxinias were simply exquisite; indeed, I hardly knew which to admire most, the dazzling show of Azaleas, or the delicately-rich Gloxinias, as they raised their pretty faces above the moss and Ferns among which

they were promiscuously and beautifully placed.

Of the foliage-plants I was most pleased with the Dracenas, exhibiting nearly all the colors of the rainbow, and of such luxuriant growth and beauty. Nor must I omit to mention the Tuberous-rooted Begonias, some of which were exceedingly fine. I wonder this plant is not more generally cultivated.

The arrangement of the circular tent was perfection itself. At the principal entrance was a rockery, the base being made to represent a small pool, in which were playing two jets of water, and surrounded by mosses, Lichens, and Ferns, while on either side rose a high rock pillar, culminating in an arch, all similarly covered to the base, and on the top of the arch were two life-size figures, in brown plaster, of a boy and a girl, standing under an umbrella, the handle of which seemed to serve the purpose of a water-pipe, for the water issued from the top of the umbrella, and spreading over it sent a fine shower on to the moss-covered rocks below. It was very attractive.

Among the out-door implements and other requisites were many novelties, the keenest competition seeming to be in greenhouses and lawn-mowers. In the former the great feature seemed to be glazing without putty. One firm exhibited a "Patent system of imperishable glass roofing," claiming especial merit for having all woodwork covered; no drip from condensation, no breakage from expansion or contraction, and squares easily replaced without the use of putty. There was, also, a "New Swing Fruit-tree Protector," so constructed that a wall-tree can be either covered or exposed instantly, as may be desired.

The Excelsior lawn-mower was in full swing, and although there was keen competition, the "Newburgh favorite" held its own.—JOHN HALL, *Derby, England*.

ARTIFICIAL FERTILIZATION.—In a late report of the Dundee Horticultural Association it is stated that a flower of *Victoria regia*, naturally fertilized, yielded twenty-five seeds; another, artificially fertilized with its own pollen, gave sixty seeds; another, fertilized with the pollen from another flower on same plant, gave 100 seeds, and yet another, fertilized with pollen from a flower on another plant, gave 300 seeds.

FRAGRANT CAMELLIAS.

It is reported that the gardener at the Ferentino palace, at Naples, after the labor of years, has succeeded in raising Camellias that have a distinct and fragrant perfume. The fragrance is represented to be very delicate, and somewhat like that of the Jonquil. The variety that is fragrant has flowers of a pale rose tint; although efforts have been made, no success has yet been met with in producing flowers of any other color that will yield perfume. A gentleman of Southampton, England, a Mr. WOOD, learning the above fact, makes the statement that he has had for some years, in his conservatory, two plants of *Camellia* that are quite fragrant. They are of two varieties, and are named *Tricolor* and *Donkelaarii*, and were obtained from LOUIS VAN HOUTTE, of Ghent, Belgium. The flowers are semi-double, and beautiful as well as sweet.

CYCLAMENS IN SMALL POTS.

A writer in *Gardening Illustrated* advises that Cyclamen bulbs be raised in small pots, not more than two and a half inches in diameter. He says they are "of immense value when grown with one or two dozen blooms, so that if so desired they may be turned out of the pots to be worked in with other things, and surfaced with moss in the ordinary manner. To obtain such little specimens is an easy matter; all that one has to do is to pot off some young seedlings in March, grow them along in the usual manner, but, instead of shifting them in the summer, feed them up well with weak guano-water. Such little plants could, undoubtedly, be used very effectively in various ways.

BLUE FLOWERS FOR CHRISTMAS.

In *Gardening Illustrated* a writer thus describes his treatment of *Browallias*: "Our mode is to make three sowings, a month apart, beginning early in July. The seeds are raised and the plants grown in a cold-frame. When they are in their flowering pots—four-inch and five-inch ones—we keep the lights off during fine weather, and with judicious pinching we get plants one foot through, a mass of flowers, and so stocky that they require a stake. During winter I know of no plant more useful for house-furnishing or supplying cut-flowers for bouquets."



PLEASANT GOSSIP.

MONTHLY ROSES IN WINTER.

MR. VICK:—Please tell me, through the *MAGAZINE*, if the class of Roses called “everblooming” can in this latitude be preserved over winter in the open garden by any protection? Strange as it may seem, I have never found a satisfactory answer to the above question. I have a choice collection, including Teas, Bourbons, etc., and would like, if possible, to avoid disturbing them. Also, please state if it is necessary to protect Hybrid Perpetuals the first winter after planting.—E. A. D., *Annisquam, Mass.*

Bourbon, Noisette and Tea Roses may frequently be wintered over at the north with a little protection. By giving a good covering of leaves they may be secured against frost any winter. If the plants stand singly, so that a good-sized box, say one that is three feet square, may be placed over each one, leaves enough could be packed about the plants to preserve them. If a number of plants are standing near each other, it would be best first to lay the shoots down, as much as possible, fastening them by pegs, and then set up some boards on their edges, fence-like, on each side of the plants, fastening them in place by stakes driven into the ground. The included space over the plants should now be closely packed with leaves, and these be secured from the effects of the wind by placing boards, or branches, or a little earth on them. Hybrid Perpetuals, in Massachusetts, and in this State, are always better for winter protection, although merely tying some straw about them is usually enough.

WISTARIA NOT BLOOMING.

I have had a Wistaria four years, and it has never bloomed. It seems to grow well and flourish, but it never blooms. Can you tell me why?—J. B., *Decorah, Iowa.*

The Wistaria frequently requires several years after planting to bloom, and especially in rich soils. We presume patience is all that is necessary in the case here mentioned.

NEWTOWN PIPPIN.

FRIEND JAMES VICK:—In the July number of your *MAGAZINE* you state that “there is but one kind of Newtown Pippin,” but I am quite sure that you are mistaken. Some fifty or sixty years since, when I was actively engaged in nursery and fruit growing, there were considered by all to be two distinct kinds—the yellow and the green—as much so as that there were two or more kinds of Spitzenburgs. Cox, in his work on fruits, published in 1817, gives outlines and descriptions of both as distinct varieties. KENRICK, PRINCE, WARDER, and others, describe them as distinct. The Committee on Synonyms appointed by the American Pomological Society gave it as their opinion that they were two distinct varieties. Much more could be added relating to the trees, fruit, &c., of the two sorts, but think it not necessary.—CHAS. DOWNING.

The above communication from Mr. DOWNING rectifies any wrong impression that may have been conveyed in the few lines referred to in our July number, wherein the sole object was to convey the idea that the variety referred to by a writer in a foreign journal was the Newtown Pippin, now authoritatively regarded as such, and which is the variety described above as the green one. This variety, as we understand, has always been more affected with the scab than the yellow one, and it is what is understood when the name Newtown Pippin is used. The catalogue of the American Pomological Society mentions only the Newtown Pippin, applying the name to the green variety.

OTHONNA CRASSIFOLIA.

Will you please mention in the next number of the *MAGAZINE* the treatment Othonna should receive, in regard to quantity of water and, also, sun or shade desirable. I do not find any reference to the plant in late numbers.—J. A. M., *Fort Custer, Montana.*

The Othonna needs a light soil, partial or full sunlight, and plenty of water while growing freely. There is nothing difficult about its treatment, and it is an excellent house, window, or basket plant, being very graceful and attractive.

SCOTCH HEATHER.

MR. VICK:—I enclose a specimen of a plant known here as Scotch Heather. It is found in a few very small patches on an arid soil, at Point Pleasant, near this city. A few years ago our city park authorities, with very questionable æsthetic judgment, and to the great grief of many a Scotchman's heart, opened a carriage drive through the very spot on which the Heather grew. The workmen remorselessly dug up the bonny plant, and all but effected a complete extermination. Fortunately, some kindly hand secured a few sprigs and transplanted them near the roadside. But these, in all likelihood, will not survive long, as they present a stunted appearance and are almost daily visited by unscrupulous specimen hunters. I, however, have no compunctions in sending you this sample, for, should you favor the plant with a drawing and description, you will in the best sense give it "local habitation and a name." I have carefully compared our Heather with the plant known by this name in Scotland, a dried sample of which I enclose,



and I am of the opinion that the two are one and the same, the *Calluna vulgaris* of botanists. Tradition asserts that, many years ago, the seed of the Scotch plant was brought across the Atlantic in heather-beds by the soldiers who subsequently were garrisoned at Point Pleasant. This is the view held by those who claim that the plant is an exotic. Others deny the truth of the tradition, maintaining that the plant, although very rare, is indigenous, and furnishing as proof the statement that small patches are found in one or two other localities in this Province. That the plant is found elsewhere in this Province, or, indeed, on this Continent, I have not yet seen proven. Please say what the plant is, and whether it is indigenous.—I. C., *Halifax, N. S.*

The plant described above, according

to the specimen received, is the true Scotch Heather, *Calluna vulgaris*. Botanical records show that the plant has been found in this country at Tewksbury, Massachusetts, on Cape Elizabeth, in Maine, and in Nova Scotia, Cape Breton, and New Foundland.

The existence of this plant in this country was a matter of great interest in botanical circles in the year 1861, and for some time afterwards. In that year Mr. JACKSON DAWSON, a gardener, of Boston, made it known that the plants were growing in a wild state at Tewksbury. At first it was deemed incredible that it could be a native of this country. Dr. GRAY took a great interest in the subject, visiting the locality and examining the plants. All the facts being elicited from those living longest on the farm where it grows showed a knowledge of the existence of the plants in that particular field as early as 1810, and the condition of some of the plants at that time to be such as to warrant the belief that they were at least a hundred years old, thus placing their origin near the year 1700. That part of the country is sparsely settled, and at that early date was still more so, and the spot where the heather grows is quite an unlikely one to attempt its cultivation; after considering all the circumstances, Dr. GRAY, writing in the *American Journal of Science*, said: "It may have been introduced, unlikely as it seems, or we may have to rank this Heath with *Scolopendrium officinarum*, *Subularia aquatica*, and *Marsilea quadrifolia* as species of the old world so sparingly represented in the new that they are known only at single stations—perhaps late-lingerers rather than newcomers."

Later, in 1864, when it was fully confirmed, as had previously been stated, that this Heath grew in Newfoundland, its indigenous character was quite accepted. Still later, in the same year it was announced that *Calluna vulgaris* was growing at St. Annis, on Cape Breton Island. And in 1865 the rediscovery of it in Newfoundland occurred, near Ferryland, on the east coast, where there is a small patch of it. Since then, as already stated, it has been found in Maine and Nova Scotia.

The plant being found in all these places, under conditions so unlikely for its introduction, little doubt remains that it is

indigenous, and the probability that it is so is strengthened when it is considered, as has been noticed, that it exists at the extreme western limits of Europe—Ireland, Iceland, and the Azore Islands. Newfoundland, Nova Scotia, Maine and Massachusetts are where it might naturally be expected, if found at all on this Continent. It is to be hoped that our Halifax friends will guard with scrupulous care the patch of it they yet possess.

CARNATIONS FOR WINTER.

MR. VICK:—Please tell in your next MAGAZINE how to cultivate Carnation Pinks to make them bloom during the winter in a pit. What kind of soil, and how to proportion it.—A. SUBSCRIBER, *Ironton, Ohio.*

In the spring procure small plants of the varieties wanted, and plant them in good soil in the garden. As soon as the flower-stems are developed so as to show the buds, they should be cut back to three or four buds, in order to make the plant grow bushy. This cutting back, or pinching, can be repeated as the plants grow, but, if it is desired that they shall bloom early, the operation should not be continued later than middle of August. A month later the plants will be in condition to pot; this is to be done by removing them carefully with a ball of earth. The soil should be rich—some good loam mixed with half as much old, well-decayed manure and a little sand will form a suitable material. After potting, keep the plants in a shady place for a few days, and water lightly and frequently. An eight-inch pot is a desirable size to use. As soon as the plants begin to make roots, give them plenty of air and sunlight.

If it should be preferred, the young plants, instead of being planted in the open ground in the spring, may be potted and the pots sunk or plunged below their rims in the ground in the garden; in this case extra attention must be given them to keep them properly supplied with water, or they will be very apt to suffer in dry times. Otherwise they are to be treated as described.

LINUM PERENNE.—Mrs. T., of Sandborn, Indiana, writes: "I sowed seed of Perennial Flax this spring, and it has been in flower more than a month, to my pleasure and surprise, as I did not expect it to flower until next year."

A WILD SENSITIVE PLANT.

MR. EDITOR:—Enclosed you will find some samples of a native Sensitive Plant. I have always admired it for its delicate and beautiful feathery leaflets and canary-colored flowers. It is an annual, and has a pod like the Pea. It has the advantage of being exceedingly hardy; these sprigs were cut from plants growing in the poorest yellow clay. It grows about



two feet high in favorable spots, and blooms very freely, with very attractive flowers, each one about an inch and a quarter in diameter, till the cold weather closes its modest career.—A. H. B., *Brownsville, Tenn.*

The samples received were of *Cassia chamæcrista* sometimes called the Sensitive Pea, and Partridge Pea. It is now a favorite garden annual.

A FLORAL PARADISE.

There has been a great deal of discussion among wise men, as well as those not remarkable for wisdom, as to the location of the Garden of Eden, the original Paradise, but there can be no possible question as to where the New Eden, the coming earthly Paradise, is to be situated, as will be seen by the following extract, which was first published in the *Traer Clipper*, of Iowa, from which paper it has been copied into several western journals, and which we sometime since cut from the Council Bluffs *Weekly Nonpareil*:

We have often wondered where new varieties of weeds came from that we notice spreading about old farm sites. Conversing lately with an intelligent gentleman, he assured us our women folks and VICK, the flower seedsman, were the prime causes. Samples of flower seeds come and are planted. They go to seed and fall, all having sufficient oil to protect them through the winter, and grow again and spread. The roots of some live in the ground and grow again. The American jute is a sample. Too great care can not be exercised in planting strange seeds.

We have truly builded far better than we knew. We did know that we were cultivating a taste for the beautiful, especially beautiful flowers, among women and children; we knew we had done a little to create pleasant, tasteful homes, and that these were exerting a refining influence upon fathers and sons and

neighbors, but we did not know that, with the assistance of the ladies, we had made the wilderness blossom as the Rose, adorned every roadside, and corn-field, and waste place with nature's choicest jewels; that our flowers had rooted out and driven away the thorns and briars that came with the first sin. We feel just like singing the old doxology.

How wonderfully Providence has assisted us in covering our flower seeds with oil, and thus protecting them through the cold and storms of winter. We had nothing to do with the American Jute; that must have been sown by an enemy, but, with the aid of the ladies, our flowers will soon root out this and every other unworthy thing.

WILD PLANTS IN TEXAS.

MR. JAMES VICK:—I send you a sketch of a Lily indigenous to this climate, growing wild in damp places and along the banks of rivers and bayous. It belongs to the Onion family of Lilies, and it is a good bloomer. We call it the Spider Lily, on account of the long, narrow stamens that extends from the cup, resembling somewhat the legs of a spider. When a



PANCRATIUM ROTATUM.

large and old plant is in full blow it has the appearance of a net-work of snow, and there is no prettier object. It is easily grown.

We have, also, another very beautiful Lily, pure white, with red stamens, and long petals about half an inch in width, that open very wide. It blooms in bunches of five or six at a time. It is lovely. I failed to get any bulbs of the latter when in bloom, and will have to wait until next spring.

We have a large, blue Iris growing wild that is pretty indeed. Then there is what is called the But-

terfly Lily, that grows wild on a bayou above here. It resembles a huge, white butterfly, but the plant is precisely like a Canna, so much so that it is hard to tell the difference. If you have never seen the last-named flower, I will send you a drawing of it as soon as it blooms.

I send the leaf of a shrub we got out of the forest and planted in the yard. Would be glad to know what it is. It has spikes of red, tube-like flowers; not yet in blossom.—Miss J. B., *Beaumont, Texas.*

The sketch sent was a very good one of *Pancratium rotatum*. This is a very handsome bulbous plant, and is frequently raised in the house, blooming in winter. The leaf sent is one of a species of *Smilax*, or Green-briar.

SMILAX—ROSES IN WINTER.

MR. VICK:—Will a *Smilax* do well in a tin can? About six weeks ago I bought a very small *Smilax* and I thought I had a pot large enough at home to put it in, but, on my return home, found I had not, so I took a tomato can and cut it in half, and made two holes in the bottom, and filled in around the roots with wood-pile dirt. Since that time several new sprouts have come up, two of them two feet and a half long. I want to take it out of the can and put it in a pot, as the can is quite rusty. Will it put it back very much if taken out with great care? Does the *Smilax* require much water?

What kind of a Rose will bloom best in winter in the house?—W. S. S., *Elizabeth, N. J.*

The first of these questions our enquirer has very satisfactorily answered, for the plant is evidently doing well in the tin can. With care it can be removed to a pot, if desired. When first starting, the *Smilax* needs only a moderate supply of water, but when in full growth it should be liberal.

The best Roses for house-culture are the Teas, Noisettes, and Bourbons, among which may be named Bon Silene, Agrippina, Sanguinea, Alba rosea, Cornelia Cook, Isabella Sprunt, Douglass, Duchesse de Brabant, Bella, and Hermosa.

AN AGED FLORIST.

A lady, of Barton, Vermont, writes: "When I sowed the *Lobelia* seeds I feared a failure, but was rewarded by a pot full of beautiful vines, covered with delicate blossoms of three shades. I can imagine something of the beauty of this flower under more favorable circumstances. They tell me an old lady of seventy should not charge herself with the care of flowers, but I do, especially through the winter, though I sometimes lose some of my treasures by the cold, which comes like a thief in the night."

ROCKY MOUNTAIN BEE-PLANT.

MR. VICK:—I want to tell you about a plant that I found growing, which is new to me, but may not be to you. I send you a flower. We measured it, and found it stood a little over three feet high and over thirteen feet around the outside of the branches, which were covered with flowers; there must be five hundred of the flowers on the plant, and I counted nineteen on one branch. I think it must be a honey-plant, as there are so many bees around it. It has a hard, woody stalk, and smells very much like an Elder. Let it be what it may, it is a beautiful sight, with its hundreds of flowers and buds, that look as though it might continue to blossom for weeks yet. Would it be asking too much of you, even if you do not think it worth cultivating, to tell us what you think it is, as we are all anxious to know, and we can find no one that has ever seen it before.—MRS. L. D. R., *Hastings, Neb.*



CLEOME INTEGRIFOLIA.

The specimen sent was a branch with flowers of the Rocky Mountain Bee Plant, *Cleome integrifolia*, that is now famous with bee-keepers as a honey plant.

On the same day that the letter above was received, came another, from D. S. GRIMES, of the Denver nurseries, at Denver, Colorado. This letter contained several specimens of plants, among which were two species of *Cleome*, one of them a purplish pink and the other nearly white, but neither of them *C. integrifolia*. Mr. G. wrote that the specimen with purplish flowers "is the *Cleome*, called here the Rocky Mountain Bee Plant. It is the greatest honey-producing plant known. You are doubtless acquainted with the purple variety; the white is new, a few plants of it having been found here this

year." The specimen alluded to has entire linear leaves, the longest of them not being over an inch in length, and about a line in width. As Mr. G. wrote a description of the Rocky Mountain Bee Plant, which was published some months since in the *American Bee Journal*, and then called it *C. integrifolia*, of which an illustration was at the same time given, we can only conclude that at least two species at the west are called the Rocky Mountain Bee Plant, although *C. integrifolia* is more generally known as such.

ROSES IN ALABAMA.

MR. VICK:—I write for information about some Roses that I bought a year ago last spring. They are Hybrid Perpetuals, and have grown well, but have never had the least sign of a bud on them. They have never been pruned, and have been grown in the open ground. They were not hurt at all last winter by the unusually cold weather. They seem to be perfectly healthy, with no sign of any insect-trouble, and grow side by side with other Roses that bloom well. Paul Neyron, General Jacqueminot, and Marie Bauman are the ones I have that will not bloom. Please tell me, in the October MAGAZINE, what to do with them to make them bloom.—SUBSCRIBER, *Union Springs, Ala.*

A good way to proceed with these plants is to lay down all the branches, and peg them down as closely as possible to the ground. They will be almost sure to bloom next season on the new growth.

DOUBLE SNEEZEWORT.

I have a white-flowered plant that I do not know the name of, and I enclose a branch and some leaves. Please tell its name in some number of the MAGAZINE this year. It blooms nearly all summer; the flowers stay on a long time, and are of a pure white; they are about the size of the White Spiræa. The only objection any one could have to it is that it spreads in the ground so much; but I have been able to keep it in its place by a shallow box, topless and bottomless, sunk in the earth all around it.—B.

The plant here described is *Achillea Ptarmica flore pleno*, or Double-flowered Sneezewort, a hardy perennial, with double, white flowers, about the size of the Bridal-wreath or *Spiræa prunifolia*. The flowers are valuable for bouquets.

CENTAUREA GYMNOCARPA FROM SEED.—Among other seeds planted was one packet of *Centaurea gymnocarpa*, from which I raised forty-five plants, every one of which will fill a half-bushel measure. They have supplied my own foliage bed, besides giving some to my neighbors.—L. A. S.

A MAGNIFICENT FOREST.

The well-known naturalist, HENRY A. WARD, of this city, has been for the past year traveling and collecting in Australia, New Zealand, and some parts of the West Indies. In a letter received from him by his friends he gives the following interesting account of a Pine forest in Australia. It is probably the most vivid description, and at the same time accurate account ever written of the source whence is obtained the Dammar of commerce:

"I have been making several excursions in the northern island in connection with my collections of natural history specimens. In one of these, not far from Auckland, I first visited a forest of the Kauri Pine, *Dammara Australis*. What the famous Lebanon Cedar is, or used to be, in those majestic forests which, in ancient times, furnished the material for the vessels of Phœnicians and the timber for Solomon's Temple; or what the mammoth Sequoia is—the giant among the wood-giants of California—the same is for the warm northern end of New Zealand the celebrated and beautiful Kauri. It furnishes the best ships' masts and spars which are obtainable by the British navy. I think that I never entered a forest so fine to walk in and to look up at the dark green roof through which the light of day struggles in at the sparsely sprinkled places, like twinkling stars. The foliage is not remarkably graceful, growing on the ends of the branches like little tufts on bushes. But the trunk is magnificent. It rises perfectly cylindrical and almost imperceptibly tapering, as a majestic pillar whose beautiful stature is disturbed by no side branches until it has attained its full height of one hundred to one hundred and fifty feet. Then the branches, of even larger proportions than the height would promise, spring out at right angles and turn up from their flat, radiating plane a series of small limbs which bear no verdure. The timber is much like our Yellow Pine, but is suffused with a resinous gum to a degree which I think is unknown elsewhere in the vegetable kingdom. In some specimens of the freshly-felled trees I saw resin lying like fat meat in solid layers from one-half to two inches thick. This kauri gum is an article of great demand for the manufacture of the so-called Dammar varnish, and thousands of persons are en-

gaged in its collection. Strange to say, it is of no value as it oozes, soft and milky, from the tree; it must have time—centuries of time—for attaining that solidity and amber-like appearance which marks the only good quality. In short, the gum is not gotten from the tree itself, but is dug for, in the ground, like Potatoes. The tree grows slowly, lives its lifetime, dies, falls, and rots entirely away. Then, when centuries have elapsed, and there may be no Kauri trees in the neighborhood within many miles, the gum is found beneath the soil. Burial and moisture of the earth have corroded its outer surface, but have given its inner part great density and clearness. In short, it is a wasting of the more ethereal organic elements, and a semi-mineralization similar to what has transpired in the case of amber—than which this gum is but slightly less hard and beautifully clear. Several thousand native and white Kauri gum seekers are spread through the forests and over the fern-heaths searching for this hidden treasure—prodding with a long spear till they feel it, and then digging it up with spade and pick. Hundreds of thousands of tons probably still lie buried beneath the soil of this northern island, where alone the Kauri tree has ever grown. As in the case of guano, this gum is a product which is still originating by modern growth, but which accumulates so slowly that it will probably never be utilized after what may be called the fossil store of it is exhausted. At present it forms, after wool and flax, the most important export of New Zealand, amounting to a value of about \$800,000 per year.

NEVER GET DISCOURAGED.

MR. VICK:—I have been trying to get up courage enough for a long while to write a few lines for your valuable MAGAZINE, of which I am an old subscriber. I think the MAGAZINE gets better every month. I have volumes one, two, and three bound separately, and they afford me much pleasure to take them from my library and sit under a tree or arbor and read about so many different kinds of plants and flowers, and their nature. I don't think I ever had such a love for flowers as I have now.

I have been spending about four months in the country, and, having nothing else to do, have used a portion of my time

visiting my neighbors and looking at most all kinds of flowers. I have one neighbor in particular that I visit very often; she has not many plants, but many different varieties. All her plants are in full bloom, and they look beautiful, considering the time she spends with them. I do not understand why it is that some have no trouble to make plants grow and bloom, while others try everything they hear of, and spend hours every day with them and at last give them up. "I have always been very successful in raising plants of most all kinds, and, by experience, found it the best way not to get discouraged if they do not grow two or three inches the first day I bring them into the house from the garden, or from the greenhouse. We cannot hurry nature, but must let it take its own time; it will soon repay us for all our patience. If a plant does not look as you would like to have it, do not throw it away or take it down cellar, but keep it with the rest of your plants, and continue to care for it, and, if not too far gone, in time it will improve, and perhaps will look as well as at first.

I want to say in conclusion, never get discouraged, although you may have trouble at first to make your plants grow; take good care of them and they will soon pay for all trouble.—W. S. S., *Elizabeth, N. J.*

BOTANICAL SPECIMENS.

"The study of botany is rendered especially fascinating from the fact that so much of the work is performed out of doors. In every pursuit there are required hours of recreation and exercise. A stroll in the woods is then, of all things, most enjoyable. As soon as one begins to search for and collect any special class of objects, he becomes interested. If it is to plants that his attention is called, he is surprised at the many wonders that had before escaped his observation. Each walk adds to his discoveries until he begins to marvel that he could formerly have been so blind to so much that is curious and beautiful."

"More important than all things to the student of nature, is observation. He must not be a mere reader of books, but address repeated questions to the objects around him. Each plant, and every part of a plant will be of interest. Moreover, comparison should accompany observa-

tion. Many persons have a native acuteness in perceiving details of structure, and in generalizing results, which is denied in the same degree to others. Yet, in all, the power can be cultivated and strengthened. Herein is one of the great educational uses of natural science, that it trains one to see and to think."

"The comparison of a large number of plants for the study of their structural relations and differences, or their geographical distribution, can best be made from the botanical *hortus siccus* or herbarium. Some of the profoundest laws of the distribution of plants have been worked out from dried specimens so arranged."

The above extracts are from the opening chapter of a most valuable and interesting little manual that has just been issued by GEORGE A. BATES, of Salem, Mass. It is one (No. 3,) of the "Naturalists' Handy Series," and is called the *Botanical Collector's Hand Book*. The author is W. WHITMAN BAILEY, Professor of botany in Brown University. Some of the leading botanists of the country have contributed to make the work as complete and useful as possible. The whole subject of botanical excursions and collecting is considered in detail, with descriptions of all the apparatus needed or useful, and the manner of drying and preserving specimens. Particular directions are given for different classes of plants, so that, besides the flowering plants, one may be advised how to take care of mosses, Lichen, Fungi, Algæ, &c. It is a book that all engaged in botanical pursuits must prize.

PETROLEUM FOR INSECTS.

Dr. HENRY GIBBONS has stated before the California Academy of Sciences that he has used petroleum with satisfactory success in the destruction of scale-insects on Rose bushes. He mixes petroleum with castor oil, and coats the stems and branches of the plants with it. The castor oil is said to prevent the evaporation of the petroleum, and a permanent coating remains over the entire surface of the plants to which the mixture is applied. Caution is necessary not to saturate the soil with the oil. Rose bushes that had been overrun with scale insects and were nearly dead, were in full vigor and blooming profusely two months after the use of the oil mixture.

GARDEN NOTES.

Tie lace loosely over seed-pods of Pansies when you think it most time for them to burst, so as not to be vexed by the seed flying away. When Pansy plants get loose at the roots and seem likely to break off, just lay them down and cover with earth, peg down if necessary, and they will take new root and seem strengthened and benefited every way. I wish every one writing about Pansies would give exact measurement of the largest she grows, and the color of it. I do not want a double Pansy, but large ones delight me. I have just measured a bloom of Pansy that is one inch and three-eighths from the base to the upper edge, and one inch and a quarter across it. The color is black. Perhaps this is not very large.

The picture of Cactus and Hoya together in the July number looks pretty, and might tempt some one to try them, but my experience with Hoya is ten to fifteen feet growth in one year. After it covers that little trellis, what are you going to do with it? Nip it off? Well, it will send out branches enough to cover a six foot frame in one summer. What then?

Please give the name of the Night-blooming Cactus that grows as large as a gallon pot, or larger, shaped like a balloon, and blooms freely after the third year.

You say one may put Begonia Weltoniensis out doors in summer. Now, my experience teaches me that dews and rains completely ruin the plant. I keep it sheltered from a drop of water on the leaves, but give the roots enough to keep damp; give morning sun and plenty of air and it is a beauty. After it attains its growth (it is rather dwarfish,) I cut back the main branches, so that new ones come on and so keep the plant full of bloom all the time. If the flowers drop before fully developed it is because the pot is too large. At the same time leaves will grow larger than common; but let it alone, it will soon fill the pot and then be all right for a year or more. Do not give very rich dressing. Put a neat-looking stick down the center of the pot and tie the branches up as close as you please.—R. A. H., *Smithville, Ill.*

That is a pretty good experience with Hoya, and one, probably, that not many can equal. As to the trellis, that is easily managed, by making one large enough to correspond to the expected growth.

It is quite impossible to name a Cactus from such a description.

EUCALYPTUS GLOBULUS.

As many inquiries are made from time to time in regard to the possibility of raising what is often called the Australian Fever Tree, or Eucalyptus, in this country, the following statements, made by Dr. D. J. SNYDER, in the *Ohio Medical Journal*, will, to most persons, be a sufficient answer: "I procured seed from New South Wales, and minute instruction how to plant, and had the pleasure last autumn of having several plants over two feet in height, with every prospect of complete success. The severe winter destroyed every one."

The result in this case is the same as

that we have understood to have been reached in similar trials, and the probability is that this tree is too tender for the Northern States, although it thrives in California.

A GREENHOUSE CLIMBER.

Some of our friends with greenhouses may be interested to hear of a climber with pea-shaped flowers, such as shown in the illustration. We have had but little practical experience with the plant, but



such as it has been it has confirmed the statements that have been made in regard to it. We refer to *Kennedy's Marryatæ*. It is suitable to train up the rafters of a house, and in spring will produce in great profusion its flowers, which are a bright scarlet and very beautiful, and as cut-flowers are particularly serviceable.

ITALIAN ONIONS.

Mr. P. HAYWOOD, of Ocean county, New Jersey, writes, "The seeds of Giant Rocca Onion I obtained late last spring were sown about the 10th of May. Every seed sprouted, and there was no trouble from maggots, as I scalded it before planting. They are growing better than any Onion I ever raised, either from seeds or sets. I find them larger, more tender, and sweeter than any other variety. A neighbor kept some over last winter, and had no more trouble than with the old native sorts."

KEEPING BULBS—ROSES.

MR. VICK :—Please answer the following questions in your MAGAZINE :

Which is the best way to keep Gladiolus and Tuberose bulbs over winter.

I have a Rose bush the buds of which do not get full; as soon as they begin to fill they turn yellow and drop off, and when broken are quite black inside. Will you please state the cause and oblige.—A SUBSCRIBER, *Mahonay City, Pa.*

Gladiolus bulbs may be kept over winter in sand in the cellar, or wherever they will not freeze.

Tuberose bulbs, in order to preserve their germs, which will perish in a low temperature, especially if accompanied with moisture, need to be kept dry and warm. If possible the temperature should not fall much below 65°, and near 70° is better. Kept in a warm place, a drawer, for instance, in a room that is always heated, they will winter in good condition.

We cannot state the cause of the trouble with the Rose bush in this case, but suggest that there is little difficulty with Roses that are kept in a strong, healthy condition. Plenty of manure, good cultivation, the prompt and timely use of whale-oil soap, as repeatedly advised for several kinds of insects that the Rose is apt to be infested with, these, and what other attentions may be needed, will secure good blooms. In the words of CANNON HOLE, "Your heart must be in your enterprise."

A GREAT CALAMITY.

This expression that has been seen the past few months so often in public prints is not intended at this time to refer to our beloved Chief Magistrate, the issue of whose affliction we now all await with anxious forebodings replacing our departing hopes, but to the destruction of life and property and the wide-spread suffering that has been caused by the numerous bush-fires in different parts of the country, and more especially in Michigan. With the facts of the case our readers are all too well aware to need a further recital. Such affliction merits universal sympathy, and we are sure it will be accorded, together with its material token that may in some measure alleviate the suffering and sorrow, and lighten the burden that is apparently crushing so many of our countrymen. Certainly we need not urge our readers, for we know it is in their hearts,

to do what they can, as opportunity may offer, in this cause. It is reported that at least fifteen thousand people, who a short time since were comfortable and happy, are now homeless from the devastation of fires. We will not moralize, but at such a time one may well be circumspect, and learn from the facts of the catastrophe whatever lesson may be applicable to him. We can all bear in mind that our highest glory is that sympathy that recognizes the universal brotherhood of man.

WHITE GRAINS ON ACHANIA.

When I received my Achania the stem and leaves were covered with what appeared white sand. I thought it was from the packing, and so gave it a thorough washing. In a few days it had the same appearance, and continues so, in spite of washings. The little grains contain moisture, as shown when pressed between my nails. Will you please tell me in the MAGAZINE if it is the effect of an insect, or is the natural appearance of the plant. The catalogue says it is not subject to any insect.—MRS. G. H. E., *Chicago, Ill.*

The white grains on the leaves of this plant we understand to be a waxy substance secreted by the epidermis, and its appearance is an indication of health and vigor. The same substance is found on the foliage of some other plants, and especially malvaceous plants. In the case of the Achania the white grains are particularly noticeable, standing, as they do, on so dark a background as that of this dark green plant. We have frequent inquiries concerning it, as it appears to be regarded with curiosity by all.

REMEDY FOR DIPHTHERIA.

Dr. C. R. S. CURTIS, of Quincy, Illinois, reports, in the *Boston Medical and Surgical Journal*, the results of the local use of a decoction of leaves of the Black Walnut, *Juglans regia*, in diphtheria. The remedy was chiefly employed as a gargle, or applied with a swab to the throat and fauces. A poultice of the leaves was also resorted to in some instances. The use of the gargle was unattended by discomfort, and improvement in each instance was rapid.

CULTIVATING THE CACTUS.—I wish some one who is cultivating Cactus plants would give his treatment of them, in detail, to the readers of the MAGAZINE.—LUCIE P. B., *Norwood, Mass.*

A BAD GRASS ON LAWNS.

A neighbor finds that a grass that he first noticed three or four years since is spreading over his lawn, and threatening to cover it. The grass is *Panicum sanguinale* of LINNÆUS, or *Paspalum sanguinale* of LAMARCK, the Crab or Finger grass. An instance of the growth of this grass on a lawn at one time came under our daily observation. It was a case of a newly seeded lawn and the grass came up and spread with great rapidity, so much so as mostly to hide the young plants of the other grasses. The owner of the place set to work with a lawn-mower and kept it clipped close, giving it no chance to get up. The result was that, at the end of the season it had disappeared, and the lawn was covered with a fine stand of the best lawn grasses.

The Crab grass is an annual, and if no opportunity is given it to seed it will disappear; it perpetuates itself by its self-sown seeds each fall. Unfortunately, it usually grows pretty close to the ground, the stems sometimes rooting at the nodes, and the lawn-mower will frequently run over without cutting it; consequently, it becomes necessary to use extra care, and to go over the spots with a grass-hook and cut any stems that may remain. The mowing must be continued until late in the fall, with a determination to prevent any seed maturing.

DEATH OF MAD. VAN HOUTTE.

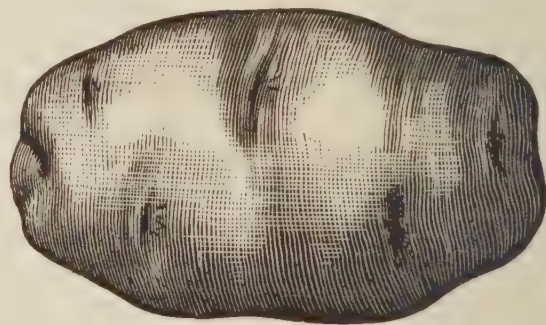
Madame VAN HOUTTE, widow of M. LOUIS VAN HOUTTE, died at the Royal Nurseries, in Ghent, Belgium, on the 18th of August. Her husband, whom she survived more than five years, most of our readers are aware, was the founder of the greatest horticultural establishment of Europe, and since his death it has been conducted by Madame VAN H. In the interests of horticulture, we are pleased to note that no particular change will be made in the business, but that it will be conducted by a son, M. LOUIS VAN HOUTTE. The following account, by the *Journal of Horticulture*, of the offerings at the funeral, is highly interesting:

"The entrance-hall of the residence was transformed into a chapel, adorned with rich hangings, and the coffin was surrounded with tall tapers, and floral crowns were arranged at the foot. These so-called crowns are offerings of the

family and friends, and are really huge wreaths, mostly oval in form, and three to four feet high. There were a great number of them, and some were extremely beautiful. Nearly every crown had what may be termed a framework of leaves of *Cycas revoluta*; the bases of two leaves are secured together, and the tops being also brought together, form a natural and most elegant oval. When the leaves were not long enough for this, they simply formed a cross in the center of the crown; but it is quite evident that they are considered indispensable in ceremonies of this kind, and the result is that, in Germany especially, the demand for large plants of this *Cycas* is always great, as the leaves can be readily sold by those who possess them at remunerative prices. Attached to each crown is what is termed 'the ribbon.' This is a ribbon of silk, about three inches wide and perhaps four feet long, each ribbon containing some motto in ornamental letters—an expression of regret or sentiment of esteem of the contributor in memory of the deceased. The ribbons are preserved by the family and cherished."

CHICAGO MARKET POTATO.

MR. VICK:—I take the liberty to inform you about my success in raising Chicago Market Potatoes. I planted in the spring of 1880, four pounds of Potatoes, cut into single eyes, and raised one hundred and thirty pounds of very fine tubers, on a small village lot. This spring I gave a farmer forty pounds to plant on half-



shares, and to my great surprise, he sent me eleven bushels of as fine Potatoes as I ever saw for my share; they run from four to twelve ounces. I gave more to other farmers, but have not had any results yet. I cut the Potatoes myself, and strictly cut only one eye to a set, and rolled the pieces in land plaster.—D. L. E., Pottsville, Pa.



WALKS AND TALKS ABROAD. PLANTS IN SPONGE.

While in the establishment of J. C. SMITH, of Erfurt, Germany, we noticed, among many interesting things, a large number of aquatic plants, that is, plants



that like much water, and naturally grow in swamps or on the margins of ponds and brooks, growing in vessels of various designs. As no water was to be observed and some of the vessels were quite flat, we were curious to know how these water-loving plants obtained their nourishment. A glance soon revealed the secret. They were growing in damp



sponge, which contained sufficient moisture to keep them growing with vigor. Of course the damp sponge could be placed upon any article that would prevent the dripping of water from the sponge when it happened to receive more than it could retain. Some of those we saw were very pretty, so, thinking it would please our

young readers, we borrowed engravings of two of the best.

Another arrangement of flowers is common and, we think, peculiar to Germany, which we will endeavor to illustrate by another little engraving. This is the attachment of small bouquets to the base of Palms. These are used mainly on funeral occasions, and are in some cases carried by the bearers. We also saw wreaths formed of Palms and flowers, in which case two Palm leaves are used, the flowers being only at the base, where the stems of the Palms are fastened together. Sometimes, for larger ornaments, two and three Palm leaves are used, spread out in the form of a huge fan, with flowers and ribbons at the base, where the Palms are tied together.



SLANG PHRASES.

Those who travel in foreign countries will learn a great many things, unless very much prejudiced, or very dull. Young people generally see the peculiarities of a country and its people quicker than those who are older, though we have seen boys who measured everything by a home-rule, and all were good or bad as they agreed with or differed from those they were accustomed to. Travel quickly teaches us our peculiarities, as well as those of the strangers among whom we sojourn. In talking to foreigners who possess but a slight knowledge of the English language

it is very embarrassing to them to hear slang phrases that are entirely unmeaning, except to the initiated. It is foolish to use cant phrases among ourselves, and insulting to thus talk to foreigners. We found very little difficulty in being understood by using plain, strong words, and speaking slowly and distinctly. A gentleman in Germany said he could understand me well, but could not understand the English, because they talked so fast, cut their words off short, and often left them half spoken, and used so many bad words. When in London, he remarked, he bought an article, and asked the price. The reply was "tuppence." He did not know that tuppence meant two pennies, and so kept inquiring how much he had to pay, when the shop-keeper became angry, and said, hastily, "Shell out, shell out! and don't keep me waiting," The shell-out troubled him more than ever, until a gentleman, hearing the difficulty, came to his assistance, and in a few sensible words made all plain.

Englishmen, do not, however, say all the foolish things when talking with foreigners, for we heard an American young man, when asked how he enjoyed his journey, reply that he was "just as happy as a clam at high water." The persons with whom he was conversing knew as much about clams as they did about the much talked-of man in the moon.

DOG OR DEER.

When taking dinner at the house of a friend, in Germany, some meat was served that, either from the style of cooking or its character, seemed peculiar, so, being in pursuit of knowledge, we took the liberty of asking what it was. Our friends could not remember the English name, nor did we understand the German, so one of the party, to enlighten us, made the drawing which we give. We at once

expressed the hope that our friends were not turned Chinese and feeding us on dog, for the drawing looked like a dog leading a blind man between two telegraph poles. This caused a general burst of laughter, at the expense of the amateur artist, for he really had attempted to show a man shooting a deer between two Pine trees.

AMERICANS ABROAD.

Wherever we go in Europe during the summer season we find Americans—on the cars, in the steamboats and streets, and at all the exhibitions. It is stated that forty thousand Americans were traveling on the Continent, mainly for pleasure, this season. If the expenses of these average five hundred dollars each, we have contributed twenty millions of dollars to the purses of our European friends. We do not know that this statement of numbers is correct, but we do know that every steamboat crossing the Atlantic is crowded, and it is next to impossible to obtain a passage, unless application is made months before the time you desire to travel. On the 18th of July we applied in Liverpool for a return passage, which we could not obtain until the 20th of August, and then had to pay an extra price for the room and bed of one of the officers of the ship.

The English language is spoken in all the principal hotels, so that the traveler without the least knowledge of foreign languages will find very little embarrassment, and can manage to get along without a courier, or guide, though in some places a guide is a great assistance, especially in large cities, like Paris. The information furnished by these guides is sometimes strangely incorrect, for, either from stupidity or meanness, they often fearfully impose upon the ignorance of their employers. As we were returning from Marseilles to Paris, we were amused



at the information that we heard a courier give a number of American gentlemen. They inquired the names of trees that they saw in the grounds along the road, and the way Maples were transformed to Oaks, and Oaks to Chestnuts was something truly wonderful. We thought if all the information furnished by that courier was of the same character, those gentlemen would return to America with a curious stock of knowledge. It is only occasionally that assistance is needed, for English is almost everywhere spoken. In fact, at the Continental Hotel, in Paris, we scarcely heard a word of French, and do not suppose there were a dozen French guests in the house. Some of the American youth, for fun, prepared a sign which they designed to post at the entrance of the hotel, "French Spoken Here." Those who know a little of foreign languages are sometimes worse off than those who know nothing. If you speak no French, for instance, you will get a little broken English, mixed up with French, that you can understand, but as soon as you utter a few words of French, they think you understand the language and rattle off a string of words at telegraph speed, that almost sets you crazy,

a woman or girl occupies the other, but the drawing is mainly done by the dog, the woman merely holding up the pole and guiding the vehicle.

It is painful to ride in one of the hacks or cabs in Paris, for the driver whips the horse continually, and as regularly as though he was beating time for music; every once in a while cracking his whip, while half-a-dozen others are doing the same, producing an infamous noise. Several times we reproved these stupid drivers for their cruelty in the best French we could command, but to very little purpose.

BEGGING.

Regular beggars abound in some parts of Europe, but the irregular begging is most embarrassing to American travelers. If you hire a cab at a certain price, the driver, at the end of the journey, begs for a fee in addition to the stipulated price. When your hotel bill is paid, if you imagine you are through paying, it will not be long before the mistake will be discovered, for half-a-dozen servants are expecting a fee; one will brush your clothes, another hand your hat, another carry your valise to the carriage, another open the door, and all hope and expect to be paid.

The stranger don't understand how much he is expected to pay, is somewhat embarrassed, and not wishing to be mean, is usually quite liberal, which encourages these people to make a raid upon the next visitor, especially if he looks like an American. It is quite true, however, that the servants are satisfied with a trifle—a few pennies—and this the traveler soon learns, so that his donations become less expensive. It is sometimes impossible to get persons to name a price for small arti-

cles, or little services, "what you like," being the frequent reply, which means more, of course, than the article is worth.

After crossing and recrossing the Atlantic, passing over six thousand miles of ocean, and visiting pleasant places in England, Holland, Germany and France, principally among the gardens and parks, and seed and bulb farms of those countries, we reached home in time to make a few notes.



WOMEN AND DOGS.

Women and girls and dogs do a great deal of work on the Continent; indeed, we sometimes thought they did about all the hard work. Women are seen at work in the fields, and mixing and carrying mortar for building, while a good deal of the peddling and carting of milk and vegetables through the streets is done by women and dogs. Little wagons are used for these purposes, to which is attached a pole, on one side of which is a dog, while

A SUMMER MORNING DREAM.

Slipping away from busy friends, one morning in last August, Aunt Marjorie stepped off the back porch of her friend's summer cottage, not far from Boston, and passing through the wood-house and across the garden, had found herself, in two minutes time, sitting on the high bank skirting the shore of a narrow, curving bit of salt water called Duxbury Bay, enclosing Powder Point. Only a narrow ridge of land separates the bay from the ocean beyond, and, leaning against the trunk of a wild Cherry tree, with glossy-leaved Bayberry bushes on either hand, her eye rested on three large vessels, with all sails set, gliding along near the shore, and seeming to sit upon, rather than in the water. Their large, white sails stood out in clear relief against the sky, and made a beautiful picture. Looking steadily for a few minutes, she seemed to lose sight of everything around, and could dreamily imagine that there was nothing in all the world but that sea and sky and those three ships. And for a brief space there was not!

Then suddenly, on the shore beneath where she was sitting, came trooping a lot of boys and girls, with baskets, pockets and hats full of various specimens for study, or trophies to be carefully treasured. Pausing near an old, furnace-like structure of blackened stones, a tall boy called attention to the clam-shells lying around and said, "Perhaps there has been a clam-bake;" then looking up he exclaimed, "Hello! there's Aunt Marjorie; she can tell."

"You have guessed correctly," she replied, with an amazed look, "but who are you?"

"O, we are VICK's boys and girls," answered the speaker.

"Bless me! what a large family! If you prowl around like this, over the stones at high-tide, and in the sand and marsh-mud at low-tide, how can he ever keep you all in shoes?"

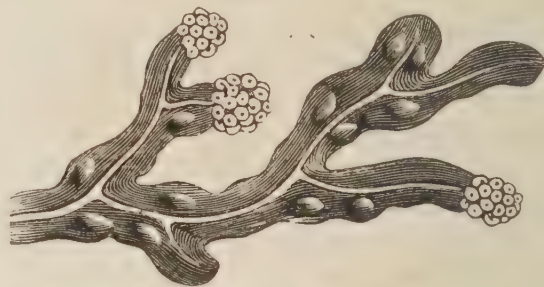
"O, we don't belong to him!" exclaimed a dozen voices at once, "we're the boys and girls who read his magazine."

"Where did you all come from so suddenly?"

Again a chorus of voices exclaimed, "O, from everywhere; we're from every State, from Canada to California, and from Oregon to Florida. We are glad

you are here, for we've a lot of questions to ask somebody."

"Well, well! this is a surprise! You see these stone steps, where I go down at low-tide to look for spoils? Well, come right up here, every blessed one of you! and sit on the bank. We'll have the best old talk we've ever had yet. It's dreadfully poky talking to you through the types. There, now; I'm glad you are all seated. This is just lovely! Do you see those ships? I was over there yesterday. There had been a strong east wind for a week, and the in-coming tide was a sight to behold. The sea-weeds and mosses are the same you find here. I got some strange specimens of what is called devil's apron, one of which was five feet long. Let me tell you a secret. If these things are rolled up smoothly while moist,



KELP, FUCUS VESICULOSUS

and then carefully dried, they can be carried to any distance; and after soaking in salt and water a few minutes, can be displayed in their original freshness, and then again rolled up and dried for future inspection. Sea-weeds and mosses can be treated in the same way, and will look as fresh as though just washed up by the sea. Their powers of recuperation are something wonderful. Could you look at my blackened, dried-up specimens of sea-weed you would be very skeptical, until you saw me unwind a strip of rag from one of the rolls, and then lay it under water in my wash-bowl, when it would appear that the weed must have thought the tide was only out on a longer stretch than usual, and had held its vitality in reserve for a general waking up when a drenching tide should return."

Then a bright-eyed girl drew from her basket a bunch of heavy, dark-looking weed, and inquired if the drying process would not spoil the pretty seed-balls which made the coarse, flat stems so curious."

"Not in the least," replied Aunt Mar-

jorie. "That is Kelp that you have in your hand, and those globular formations contain no seed."

"Then of what use are they?" inquired two or three at once.

"Ah, that's the question! What, indeed? Open some of them. They contain neither seeds nor water—nothing but air. As nothing was made in vain, think for yourselves of some use they can serve."

"Are they for floats?" inquired a little fellow with snapping eyes.

"O, they're buoys!" said another boy, whose father owns a Mississippi steamer.

"That's it exactly. You two boys have thought it out for yourselves. They buoy up the heavy mass as it grows, and keep

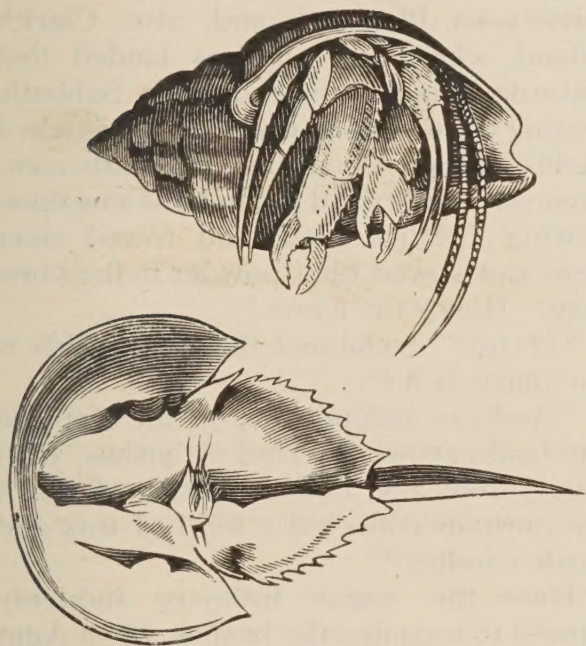
pressure, will you explain how it gets in there in the first place? If the stems were hollow, we'd suspect there were secret valves inside the air-cells."

"I cannot tell you how it comes; I only know that as the cells increase in size they are always filled out tightly with air. At the very beginning of marine studies you find marvels. As you advance they increase, until you are lost in wonder and amazement at the intricate construction and marvelous workings of the creations of the Deity. Even of this Kelp there is much yet to be learned. The branches of some varieties terminate with finger-like ends filled with a glutinous fluid, or a white, jelly-like substance. It would require much time and study to find out for one's self all their habits of growth. But you'll find that knowledge acquired in that way affords ten-fold more pleasure than the second-hand information derived from books.

"Now empty your baskets and pockets in parcels here on the grass. O, what a lot of them! Here are several different-colored mosses, some brown Rockweed, and one nice specimen of Finger Sponge. Here is the Marsh Rosemary, and here a bunch of the beautiful Samphire, that grows so freely in the sand of the shore below us. You'll notice that it may lie around a week without wilting; perhaps, like the Kelp, holding its vitality for the tide to come in. Taste it. You'll find, besides its salty flavor, that it has a slight acid taste. I asked a certain Dr. B., a chemist, for a reason for its presence, for I had noticed the same in other plants on the shore. He replied that possibly nature had designed it as a protection against the alkaline properties of the water. I eagerly accepted that as conclusive. For do not the barren wastes of our western country prove that their saline properties are fatal to vegetable growth!

"I see that all of you have found the cast-off shells of the Horse-shoe crab. They will give your younger brothers and sisters at home a very good idea of the creatures themselves. The other day I sent a large fellow, alive, to a boy in Ohio. I laid him on his back on a bed of seaweed, and at the end of his trip he made a great sensation, and lived in a tub for several days after."

Just then spoke up a boy and said:



HERMIT CRAB INSIDE OF SNAIL-SHELL. SHELL OF HORSE-SHOE CRAB.

it swaying in the water, instead of settling in the sand or mud. That long, leafless kind, that some of you have wound like a skein over your arms, is filled with air its whole length. Its interior is full of air cells, so that if it were broken into short sections the air could not escape. Pass a thumb and finger, tightly pressed, along its length and hear it snap, snap, as the tiny air-cells burst with the pressure. Is it not wonderful how Providence has provided everything with the very best conditions for its development?"

Here some of the party, who had been examining the bulbs on their Kelp, declared that those, too, were air tight, and would burst upon pressure. "And if," said one boy, "the air cannot escape on

"Here's a strange thing inside of a snail-shell. I've kept it covered for fear he'd get away."

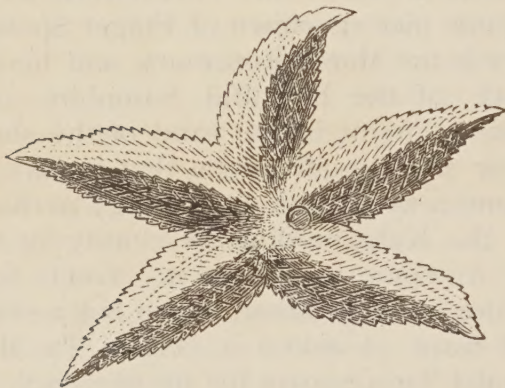
"No danger; that's a hermit crab, and he will not leave his stolen shell until he grows too large for it, and then he'll find another and flop himself into that."

"Here I see you have bits of stone covered with barnacles. The inner enclosure is a bivalve, and opens like a tiny clam set up edgewise. By putting them under water and looking through a glass you can see them put out a hand, with long, fringed fingers, and scoop in the water."

"Here I see you have a fine, large pair of lobster-claws. They are pure, and polished as ivory, and make very pretty mantle ornaments for an inland home, as also does a group of those star-fish you have, when set up edgewise in a large clam-shell of beach sand."

"But, really, I fear I shall have to leave you for a while, for we were to have chowder for dinner, and——"

"O, please wait a little longer," said the



STAR-FISH.

tall boy; there are so many things we want to know yet. Tell us about the boats down in the bay."

"Those are owned by fishermen. The one without sails is called a dory, and the broad, flat one is called a gundalo."

"It would be called a barge on the western waters," said the steamboat boy.

"Yes, I know. In the bay here are caught mackerel, cod, blue-fish, perch, and other fishes. My young friend, Freddie, caught seventeen mackerel one day last week, which was doing pretty well for a city chap."

"Now tell us, please, why this is called Powder Point. We started from the southern extremity of the shore, and noticed the horse-shoe shape of the bay,

but we saw nothing to remind us of powder."

"You must have forgotten your history. This is a central point from which several others of historical interest can be seen. First, let me call your attention to that red-roofed building across the bay to the northeast. That stands on the Daniel Webster estate. That building to the right of it receives the terminus to the French Atlantic cable. It is a desolate spot, and one man only lives there on a salary, whose duty it is to keep the serf from washing the cable bare. From the other shore, this morning, you must have noticed a monument on a prominence just across the bay. That stands on the old Miles Standish estate, and was erected to his memory. To the left you could have seen Plymouth and, also, Clark's Island, where the pilgrims landed that Saturday night to spend their Sabbath, fearing the mainland could not be reached before sunset, when their Sabbath commenced. Afterward the Indians saw them sowing Lettuce seed, and rowed over here and sowed their powder in the same way. Hence the name."

"O, ho!" exclaimed the boys, "this is the place, is it?"

"And just behind you, on the slope of the bank, grows the kind of bushes, Bay-berry, from the boiled berries of which the puritans collected a kind of wax and made candles."

Here the eager listeners suddenly turned to examine the bushes, when Aunt Marjorie saw three or four of them, who were leaning against loose rocks near the slope, go tumbling headlong down the bank. The others made a spring to save them, and losing their balance followed after.

Aunt Marjorie gave a cry of dismay and—awoke!

The ships were nearly out of sight, the bank looked lonely and the shore desolate. As her eyes rested on a shoal of seals, bobbing their shining, black heads down in the bay, she thought, "Well, every word I said in my dream was true, any way. I only wish the boys and girls could have been real! O, how disappointed I am!"

And then she heard, across the garden, the voice of black-eyed Alice, calling that dinner was ready and waiting for AUNT MARJORIE.



PYRETHRUM AUREA.



CENTAUREA GYMNOCARPA.



COLEUS, HERO.



ALTERNANTHERA.



ACHYRANTHES.



COLEUS, THE SHAH.

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